KARNATAKA A RAPID PRIVATE HEALTH SECTOR ASSESSMENT

Discussion Document



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I Introduction

Background

This short paper presents "A Rapid Private Health Sector Assessment" for Karnataka. It is a discussion document primarily addressed to health policy-makers at the state and national levels. It is also aimed at an internal World Bank audience currently supporting state governments in introducing health system reforms. More specifically the findings of this study and the discussion that it engenders will be used to inform the design of the proposed Karnataka Health Nutrition and Population (HNP) project.

This document is also a background paper for a wider World Bank study entitled "India: Private Health Services for the Poor", May 2005. In the course of the study the World Bank research team also visited Punjab, Andhra Pradesh and Bihar to conduct similar rapid PHSA exercises.

The findings presented in this discussion document are based on a World Bank mission to Karnataka undertaken between June 30th – July 11th 2003. During this time, the mission team traveled extensively throughout Karnataka to review public and private health facilities and providers and held discussions with interested stakeholders including; government officials, representatives of the private sector, public health providers, academics, NGOs active in the field, rural medical providers, private nursing homes, for profit and not-for-profit institutions.

Objectives of the study

This discussion document has the following objectives:

- (i) Provide a situation analysis of private sector health services for the poor,
- (ii) Assess public-private partnerships,
- (iii) Assess the status and coverage of health insurance,
- (iv) Present suggestions for discussion to achieve the full potential of the private sector,
- (v) Assess the political economy for change.

The document starts with an introduction on the demographic and health statistics for Karnataka. It goes on to present an overview of the burden of disease and health outcomes within the state. This serves to identify the most important health issues that the state health system needs to address to improve health indicators and meet the Millennium Development Goals (MDGs) and Karnataka's own health goals presented in Vision 2020.

Later sections of the document introduce the different types of private service provision available in the state as well as emerging experience with public-private partnerships. The note suggests promising future options to realize the full potential of the private sector and identifies areas where more research is required. It is expected that in Karnataka, many of these areas will be addressed through grant-funded studies that are about to be undertaken as part of the preparation of the Bank supported Karnataka Health Systems Project.

II Context of the Study

With a population of 55 million and an annual per capita income of US\$454, Karnataka is a middle-tier Indian state with poverty and health indicators that closely match those at the national level. More than a quarter of the population live below the poverty line and one-third remain illiterate, with females (43% illiterate) currently way behind their male counterparts (24% illiterate). High poverty rates and the poor education of women have negatively impacted health outcomes especially maternal and child welfare. Despite some progress in health outcomes, much remains to be done and disturbingly many health indicators have remained stagnant over the past five years.

Health Outcomes and the Burden of Disease

Examining the burden of disease in the state serves to set the context for the study and focuses it on the issues that will have the greatest impact on health outcomes. Official statistics in this area only cover conditions that are treated in registered public and private hospitals and dispensaries but they do not cover treatments sought at unregistered (and sometimes unqualified) rural health care providers.

Table 1: Karnataka, Leading Conditions Treated in Hospitals and Dispensaries, 1999

Condition	No. OPD	No. IPD	Deaths ¹	% OPD	%IPD	% deaths
Intestinal Diseases	1,059,362	78,025	630	8.8%	9.3%	2.8%
Tuberculosis	115,757	43,281	2,034	1.0%	5.1%	9.2%
Anaemias	1,066,606	21,580	525	8.9%	2.6%	2.4%
Cataract + Conjunctivitis	327,127	26,906	2	2.7%	3.2%	0.0%
Heart Disease	140,272	18,842	2,032	1.2%	2.2%	9.2%
Upper respiratory tract ²	430,073	15,616	66	3.6%	1.9%	0.3%
Lower respiratory tract ³	2,193,489	71,383	1,153	18.2%	8.5%	5.2%
Diseases of the teeth	342,659	1,306	6	2.8%	0.2%	0.0%
Digestive system diseases	341,962	27,570	782	2.8%	3.3%	3.5%
Obstetrics ⁴	291,328	193,240	175	2.4%	22.9%	0.8%
Normal Delivery	613,934	7,654	111	5.1%	0.9%	0.5%
Open Wounds	498,031	7,989	112	4.1%	0.9%	0.5%
Burns & Poisonings	57,299	14,749	3,495	0.5%	1.8%	15.8%
Traffic accidents	58,103	13,818	571	0.5%	1.6%	2.6%
Other violence	1,966,130	138,584	3,959	16.4%	16.5%	17.8%
Total	12,025,211	842,377	22,185	100.0%	100.0%	100.0%

Source: Department of Health and Family Welfare, Government of Karnataka

¹ Deaths from non natural causes

²Tonsils and Adenoids

³Bronchitis, Pneumonia, Influenza, Emphysema

⁴ Excluding abortion and normal delivery



Moreover, due to medical and legal implications, injuries, accidents and other violent incidents are almost all treated at public hospitals which tend to distort their importance in such data sets. With this caveat, the table above presents recent data on the number of conditions treated (outpatient, inpatient and cause of death) in hospitals and dispensaries in Karnataka.

The table illustrates that the leading conditions in outpatient care were; diseases of the lower respiratory tract, open wounds and other violence, anaemias, intestinal diseases (mainly gastroenteritis and amoebiasis), normal deliveries and diseases of the teeth and other parts of the digestive system (mainly chronic liver diseases and peritonitis). Inpatient care illustrated a similar overall pattern with the addition of obstetric causes and eye diseases such as cataracts and conjunctivitis. The table also illustrates that heart disease and burns and poisonings are also leading causes of death although there are not as many numbers of patients seeking treatment for these conditions. Furthermore, a recent study in Karnataka found that reproductive ill-health accounted for half of all illness-days and for 31% of total curative health care expenditure.¹

Indicators on the burden of disease in Karnataka illustrate that 51% of outpatient and 54% of inpatient care is devoted to conditions related to the Millennium Development Goals (MDGs). In addition to focusing on the MDGs (see below), government should also consider longer term actionplans for other major causes of morbidity and mortality such as the 37% of non-natural deaths resulting from injuries caused by violence of various sorts and traffic accidents and the high rate of deaths from diseases of the heart. This study will focus attention on the MDGs.

Targeting the Millennium Development Goals

Millennium Development Goal No. 4 is to reduce the child mortality rate by 2/3rd between 1990-2015. In Karnataka the child mortality rate and the infant mortality rate (IMR), both key indicators targeted by the Government of Karnataka (GOK) appear to have stagnated over the past 5 years. A Task Force for Health and Family Welfare recommended introducing the availability of a second birth attendant who would ensure spontaneous breathing, prevent hypothermia and other problems thus reducing neonatal deaths, an important component of infant mortality.²

Table 2: Karnataka, Selected Health Indicators 2001 and project 2020

Health Indicator	2001	2020	MDG
Under 5 mortality (per 1,000)	69	35	Reduce by 2/3 rd between 1990-2015
Infant mortality (per 1,000)	58	25	
Maternal Mortality (per 100,000)	195	90	Reduce by 3/4 between 1990-2015
Life expectancy	63.6	72.5	
Percentage of children immunized	60	90	
Malnutrition (weight for age)	51.5%	27%	Halve the proportion of people suffering from hunger

Source: NFHS, SRS 1999, 2001 Census, Vision 2020.

Bhatia and Cleland (2001).

It should be noted that there are wide discrepancies between data sources on the IMR. The latest NFHS for 1998/99 states that the IMR was 51.5 per 1,000 while the Registrar's official data for the same year put it at 58 per 1,000.

Millennium Development Goal No. 5 is to reduce the maternal mortality rate by ¾ between 1990-2015. The current MMR in Karnataka at 195 is considerably lower than the national average of 400 but still far from the desired goal of 110. (There are also large discrepancies between estimates of MMR in Karnataka that range upto 400). Improved maternal nutrition and coverage of antenatal and obstetric care along with the implementation of the universal immunization program will contribute to lower IMRs and MMRs. The state is also targeting a doubling of the proportion of births attended by a skilled health worker from the current 45%.

Millennium Development Goal No. 6 is to have halted the spread of HIV/AIDs, malaria and other major diseases. In addition to more visible illnesses, HIV prevalence among STD clinic attendees, in Karnataka, is about 16% and among women attending antenatal clinics it was 1.13% in 2001. These figures indicate that HIV has crossed over from subpopulations engaging in high risk behaviors to the general population and it signals that the epidemic has reached a generalized stage. This could have catastrophic effects on the state health care system unless successfully and rapidly tackled. The current proportion of immunized children, at 60% is disappointing for a middle-tier Indian state like Karnataka. Successfully increasing the rate of immunized children to the target of 90% will play a major role in reducing the spread of communicable diseases that are prone to immunization. Within this context, the following sections review the status of primary health care both in the public and private sectors.



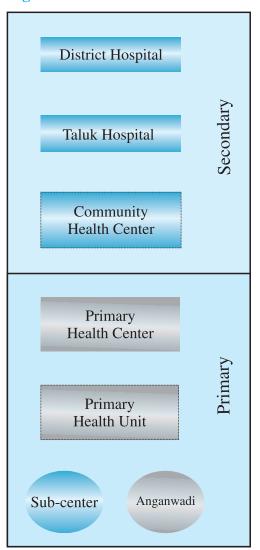
III Public Primary Health Care in Karnataka

Overview of the Public Primary Health Care System in Karnataka

Public primary health care in rural Karnataka is centered on the Primary Health Center (PHC). Karnataka currently has 1,685 PHCs and 583 PHUs. The PHC is intended to serve a population of 30,000 with smaller populations in the more remote rural or hilly areas and larger populations covered in urban areas. However, due to political interference in the site selection of PHCs, their distribution is uneven and needs to be rationalized to reflect closer the actual needs. Occasionally, PHCs are also accompanied by smaller Primary Health Units (PHUs), however, the later have been phased out gradually or upgraded.

The PHCs are hubs for 5-6 sub-centers that each cover three villages and are operated by an Auxiliary Nurse Midwife (ANM). In addition to the sub-centers which are often no more than

Figure 1: Health Care Structure



the ANMs quarters, village level primary health care is also supported through a network of anganwadi (nursing) centers that offer free nutrition and child care to children between the ages of 3-6 years.

At the higher levels the state is aiming for a community health center (a 30-bed hospital) for every 4-5 PHCs. Each of these CHCs is expected to include at least one physician, one general surgeon and one gynecologist and would cover a population of at least 100,000. At the moment there are 249 community health centers in the state (1 per 220,000).

A comparison with other states in India illustrates that Karnataka matches or does slightly better than all-India averages in terms of population covered by public primary health facilities. However, there are several states such as Kerala and Tamil Nadu that have a higher number of facilities at the lowest levels of the health care system.

Table 3 summarizes rural health services in selected states. It is clear that health facilities in Karnataka are more concentrated at the higher evels of the health care system with fewer sub-centers to each PHC and more CHCs per PHC. However, it should be noted that the number of sub-centers under each PHC is determined by population norms and that simply increasing the number of facilities alone is unlikely to contribute to improved health outcomes for the reasons explained below.

Table 3: Rural Health Infrastructure, selected Indian states

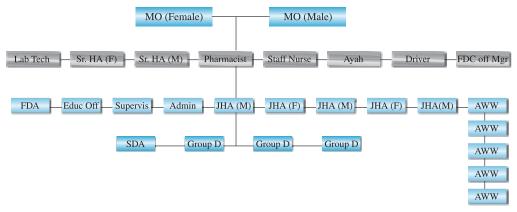
		Karnataka	Andhra Pradesh	Kerala	Tamil Nadu	India
Average area	Sub Center	23.03	25.54	6.97	14.27	22.89
covered	PHC	117.13	202.18	36.98	86.27	136.22
(sq.km)	CHC	774.88	1,303.93	443.76	1,720.58	1,154.82
Area radial	Sub Center	2.71	2.85	1.49	2.13	2.70
distance (km)	PHC	6.10	8.02	3.43	5.24	6.58
	CHC	15.70	20.37	11.88	23.40	19.17
Area number	Sub Center	3.32	2.52	0.27	1.82	4.29
of villages	PHC	16.91	19.91	1.44	11.02	25.54
	CHC	11.84	128.43	17.30	219.75	216.53
Number of Sub	Centers per PHC	5.09	7.92	5.31	6.05	5.95
Number of PHO	Cs per CHC	6.62	6.45	12.00	19.94	8.48
Ratio of Female	e to Male MPW	1.62	1.32	1.36	4.62	2.09
Av. Population Female MPW	covered by ANM /	3,837	4,466	4,748	4.305	4,707

Source: Rural Health Statistics in India, 1998: Bureau of Health Intelligence, GOI.

Overview of PHC operations

The PHC is charged with providing promotive, preventive, curative and rehabilitative care. This implies offering a wide range of services such as health education, promotion of nutrition, basic sanitation, the provision of mother and child family welfare services, immunization, disease control and appropriate treatment for illness and injury. It is reported that the PHCs are not currently able to fulfill all these functions, many of which have a strong public good component. As such, the private sector can still play a role in delivering these services, although they will have to be funded by the public sector. Some services will have a mixture of public and private good characteristics, while others will be purely private goods. It is the latter group of services that are most amenable to privately-funded, privately provided health care.

Figure 2: PHC Staffing Structure



^{*} Note: The Anganwadi Workers (AWWs) although attached to a PHC are not part of the PHC complement.



The current PHC structure is too rigid to respond efficiently to health care needs. In order to deliver this package of services, the PHC has the staffing structure presented in the figure above. Each PHC is headed by at least two Medical Officers (MOs) one female and one male, while some larger PHCs may have 3 or 4 medical officers. The MOs are qualified to at least MBBS level. The PHCs exhibit very little differentiation despite markedly different populations and circumstances. Public health officials are focused on and limited by the requirement to fill sanctioned posts rather than responding to local needs.

Many PHC posts are vacant for long periods. Although the above structure represents the sanctioned posts for a typical PHC, at any one time many of these posts will be vacant. A field visit to a PHC in Nelamangala Taluka revealed a sanctioned post complement of 25 of which only 18 positions were filled. Budgetary figures indicate that on average PHCs have 25% of sanctioned posts unfilled. It is not clear whether this is a deliberate strategy to reduce the budgetary burden or simply a result of administrative inefficiencies. Moreover, when posts are filled doctors are often absent. A recent study has estimated that country wide absenteeism rates in India are 43% in the public health sector.³

PHCs are a costly method of providing primary health care. The monthly costs of running an average PHC are estimated at approximately Rs180,000 (US\$4,000). An indicative breakdown of these costs is presented in the table below –note this does not include the costs of running a vehicle or ambulance or additional equipment such as x-ray etc. Moreover, it does not include the cost of constructing the premises or maintaining the buildings. However, as only 75% of total sanctioned posts are filled, the actual salary costs incurred by government will be less than this theoretical maximum.

Table 4: Estimated monthly operating costs of a typical PHC

Position / Item	Gross salary (Rs per month)*	US\$	Number of posts	Total
Medical Officer	20,000	440	2	40,000
Health Education Officer	9,000	220	1	9,000
Sr. Health Assistant	10,000	286	2	20,000
Junior Health Assistant	6,500	187	5	32,500
Lab tech/ Pharma/ Staff Nurse	12,000	264	3	36,000
Supervisor / Admin	8,000	176	2	16,000
FDA/ SDA	3,500	165	2	7,000
Driver / Ayah	2,000	154	2	4,000
Group Ds	1,631	146	3	4,893
Anganwadi workers**	500	11	5	2,500
Utilities (water, electricity and telephone)	400	9		400
Essential drugs	6,250	137		6,250
Total Operational Costs				178,543

^{*} Including bonuses and gratuities which mean that the gross salary is about twice the basic salary.

^{**} Including transport allowance

³ Namzul Chaudhury et. al. (2003)

Limited MO salaries are an obstacle to attracting qualified doctors to the rural areas. The breakdown of costs illustrates a number of issues that are preventing the system from reaching its full potential. Firstly, the doctors' salaries are extremely low. Entry level MOs are paid a basic starting salary of around Rs10,000 this is not only low in absolute terms but is also low when compared with the salaries of other health and ancillary workers. Moreover, given the high costs that most students have paid for their medical training such a limited salary will often be insufficient to recoup their investment in education and may encourage some government doctors to seek informal payments. As many medical students are offered subsidized training by government it would be justified to ask these doctors to serve in the rural areas following graduation.

Anganwadi workers are treated almost as volunteers, despite their role in the front line of health care. They come into regular contact with mothers and children on a daily basis and if well-trained and well-remunerated their role supporting ANMs could be strengthened. Anganwadi workers are supposed to receive six months training but it is reported that in practice many are lucky to receive a single month's training. Moreover they receive very little support either from public sources or from the community.

PHCs appear to be poorly utilized. Our field visits to various PHCs in different districts of Karnataka, revealed that the average PHC receives approximately 50 patients per day or 1,200 per month.⁴ Therefore, the cost of each visit is approximately Rs150. This figure does not take full account of the amount of non curative work that the PHC undertakes, but nevertheless, it is interesting to note that this amount is approximately 3-4 times that charged by a private clinic and approximately 10 times that charged by an APP.

It is ineffective to provide inpatient services at the PHCs. It is unusual to find beds at the primary health care level in any country. In India, this is largely a historical vestige of the establishment of the PHC's as a vehicle to promote permanent methods of sterilization. Currently, each PHC has a few beds for in-patient care and deliveries. However, none of the PHCs visited had any inpatients. Moreover, a recent study of prenatal care in rural Karnataka has shown that 87% of women want to have a home delivery. It is also unclear who is meant to attend to such in-patients during the night or on Sundays when the PHC is closed. Therefore it is not surprising that beds at PHCs are extremely underutilized. The provision of beds at every PHC should be reviewed in light of their poor utilization record.

There are a number of reasons for the low utilization of the PHCs (see also section on health-care seeking behavior below). Firstly, villagers are reluctant to take a day off work and travel several kilometers, to the health center to find that the doctor is not available. Secondly many villagers complain of having to make informal payments for consultation and/or medication that should be offered free of charge. Thirdly the PHC opening hours between 10.00am and 3.00pm are not convenient for most rural dwellers who often seek health care services in the evenings between 3.00pm and 9.00pm or at night in case of emergencies.

ANMs are not always responsive to patient's needs. A review of the records at Nelamangala Taluk indicated that ANMs attended about 12% of deliveries roughly equal to the proportion of births attended by the Dai (traditional birth attendant). Villagers complain that ANMs are not

This estimate is confirmed by a 2002 study conducted in Dharwad by the Center for Multi-Disciplinary Development Research (CMDR), People's Perception about Health Care Provision.



available for deliveries at night, even if the mother was willing to come to the PHC. In addition, nearly a third of women who had planned to have an ANM assist at their deliveries finally had a Dai or an experienced relative in attendance, since the ANM was either not available or unwilling to attend if women went into labor at night (Matthews 2001).

Administrative accountability is lacking as is community voice. In general, treatment in the public sector seems to vary considerably between villages with some dedicated ANMs willing to visit pregnant women at their homes or in the PHC. The current variations in service delivery are a result of a lack of supervision, follow-up or incentives that would encourage such behaviors and improve administrative accountability. The local community served by the PHC has little say in PHC operations (see below).

Public health management capacity is lacking. In general, the public health care system is managed and overseen by the District Health Officers. Although they are qualified doctors, they have little or no training in public health management and are transferred frequently. Moreover, even if they had the training they do not have the flexibility to reallocate financial, capital and human resources to achieve better outcomes. Strengthening the capacity for public health management at the District and Taluq level is crucial to nurturing partnerships with the private sector.

Problems with Public Primary Health Centers

Later sections will present more evidence that the PHCs are not able to deliver effective services to the communities that they serve. Community members state that this is due to a number of different reasons that are listed below and discussed in following sections;

- Absent doctors: It is difficult for the public sector to attract qualified doctors to the
 rural areas. Although in theory, Medical Officers are required to be present at the
 practice, many medical officers visit the PHC infrequently, preferring to operate
 parallel private clinics in urban areas or operate private practices from their residences
 after hours.
- Lack of medicines: The current budget for essential drugs at the PHC at Rs75,000 per annum is inadequate to ensure that sufficient drugs are available at the PHC, especially if the PHC is staffed with dedicated health workers and able to attract a large number of patients.
- **Informal payments:** Although not officially sanctioned, most PHCs require patients to make small informal payments prior to receiving treatment. Once the costs of transport and time taken to get to the PHC are factored in, this often makes the cost of public sector health care more expensive than low-cost private care providers.
- Little or no community participation: The community is not involved in the operation of the PHC. In theory, the PHC is monitored by the Panchayati Raj system. In practice, villagers complain that they do not know which individuals are members of the community health management group. This results in a situation in which the PHC is not responsive to local needs especially with respect to; opening times, services provided and customer satisfaction.

- Poor condition of PHC infrastructure: When government budgets are under extreme
 pressure the first area that is usually identified for cutbacks is the maintenance budget.
 Most PHCs in Karnataka are poorly maintained and supplied only sporadically with
 electricity. Vehicles quickly fall into disrepair as spares are not forthcoming and/or the
 process required to replace the simplest parts is so convoluted that even a flat tire can
 put a care out of action for over a year.
- **Distance to the PHC** / transport links to the center: PHCs in rural Karnataka cover a radial distance of over 6km. If public transport is available, such journeys cost Rs10 each way and, when seen in conjunction with the above issues, acts as a disincentive for the poor to seek health care at the PHC. Such a cost should also be compared to the Rs10-20 charged by rural medical practitioners (see below). However, there is also evidence that the poor are willing to spend money on transport if they are assured of the level and quality of health care available at their destination (see below).



IV Situation Analysis of Private Health Care Providers for the Poor

Introduction

Private sector health care in Karnataka is, for the purposes of this study, defined as all non-governmental health care that is provided in the state. This includes; NGOs, for profit and not-for-profit institutions, private clinics and nursing homes, rural medical practitioners (whether registered or not) and donor-funded project facilities.

The private sector is the dominant health service provider in both rural and urban areas and for both inpatient and outpatient care. The decade to 1996 witnessed a steep decline in the market share of public health services. The proportion of patients seeking ambulatory care in the public sector fell from 32% to 26% in rural areas and from 30% to 17% in urban areas. Similarly, by 1996, the private sector accounted for 54% of rural hospitalization and 70% of hospitalization in urban areas. It is likely that the share of the private sector has increased further since the last health round of the national sample survey. Private health care is currently used by all segments of society and constitutes a rapidly growing area. To ignore this segment of the health care is to ignore the majority of health care provision in Karnataka even in rural areas.

Although government officials are unwilling to admit it, much of the private sector capacity, especially the facilities used by the poor, has emerged to fill a void that is left by inadequate public sector service provision. In most cases, public sector infrastructure and appropriate facilities are available. However, as explained above, in practice, the key staffs such as doctors and nurses are often absent, drugs are in short supply and transport costs and travel time, as well as the need to make formal and informal payments have deterred the poor from seeking health care at public facilities. This is especially true of Primary Health Centers (PHCs) that are critical to the health of the poor and improving the Millennium Development Goals.

In response to this situation two broad types of private sector service provision, *for the poor*, have emerged. Each of these categories is discussed below:

- (i) Alternative Private Practitioners (APPs) and
- (ii) Non-government health care facilities (including for profit, not-for profit and hospitals run by NGOs, charitable institutions, registered societies and corporations.

Alternative Private Practitioners (APPs)

Every village has at least one or more Alternative Private Practitioners (APP). These individuals are either doctors qualified and registered in traditional Indian medicine such as Ayurvedic medicine, or have no formal medical training at all. In rare cases, usually in semi-urban areas some APPs are formally qualified allopathic doctors but their practices closely resemble those of unqualified APPs. In some cases the latter group is subsidized by donors, NGOs or wealthy philanthropists but the vast majority survive by charging for their services. The profile of the typical APP below is derived from visits to half a dozen male APPs in three districts of Karnataka.

⁵ National Sample Survey 52nd round.

Equipment: In general, APPs operate from a single rented room, often living in a room above or adjacent to the clinic. The only equipment that is commonly found is a patient's chair or bench, a stethoscope, blood pressure gauge, and syringes. Closer to urban areas, APPs will sometimes have an additional room where intravenous drips are administered, while some have the ability to carry out urine and/or blood tests. All APPs visited had a telephone and connection to the electric grid (although power supply was extremely erratic, no more than a few hours per day, in most areas) but none had a refrigerator.

Qualifications: About half the APPs that we visited were registered and qualified in Ayurvedic medicine. One was a qualified MBBS doctor and the remainder had no formal qualifications or training. The ayurvedic doctors are able to provide ayurvedic services but they report there is little demand in the village for such treatments. One APP in Hubli district attends an annual refresher course in ayurvedic medicine for which he pays Rs500. The course is provided by a union of 400-500 ayurvedic operating in the area. Despite their lack of qualifications in allopathic medicine all APPs practiced allopathic medicine largely in response to popular demand. Among those with no formal qualifications some had inherited the practice from their fathers, others had "learnt the trade" working in PHCs or private nursing homes. The Supreme Court has ruled that any person practicing in a medical system in which he/she is not qualified is a quack. The vast majority of APPs fall into this category.

Medical practices: Patients visiting an APP typically come with aches, pains, fevers, diarrhea or vomiting. APPs also care for pregnant women and report giving them tetanus immunizations, hematonic tablets and calcium. All APPs report that the public want to see a doctor and get an injection that will provide an instant cure. Failing that, they are prepared to take tablets but few will leave if they have only been given counseling and advice. APPs agreed that perhaps 90% of patients are given an injection following the consultation and the charging structure is such that they only pay for the injection and not the consultation. Only one of the APPs we visited was actually qualified to give injections (an MBBS doctor). The others were practicing varying degrees of what the Supreme Court has termed quackery e.g. injecting through clothing, not using clean needles etc. The most common injection given was a Vitamin B12 complex, little more than a placebo to satisfy the demand for injections. However, all the APPs also administered a variety of anti-biotics and steroids and one of the unqualified APPs also offered intravenous saline solutions. APPs displayed a variety of attitudes to needle protocols ranging from reportedly using disposable needles, to boiling needles in hot water. Some APPs use the same syringe and change the needle while others do not bother changing either. Even those that did follow sterile procedures were not able to dispose of their needles in an appropriate manner.

Referrals: APPs refer their patients to the local PHC or Taluka hospital if the latter is nearby. Sometimes they are paid a "finders fee" by private nursing homes. The cost of the bus journey to the local PHC varies between Rs10-Rs20 depending on location. It is also reported that patients would have to pay at least Rs5 in informal payments per visit at the PHC.

Popularity: In the absence of regulation, such providers have been allowed to prosper. Even small villages of between 6-10,000 inhabitants often support two or more APPs. Adapting flexibly to demand some APPs visited two or more villages during the week. Villagers stated that the reasons for using APPs include; the practice is open at convenient times (APP practices are usually operated from 8am – 1pm and then again from 6pm –10pm), those in which the APP



lives on the premises are open all the time, APPs are prepared to make house calls on elderly or incapacitated patients, and the APP is often of good standing and well-known in the community and treats patients with kindness and respect. Another attractive feature is service provided on credit to those who cannot afford to pay immediately.

Cost Structure: There are little or no capital costs involved in starting up such a practice. The consultation room can be rented for Rs150/month while a further Rs300/month secures reasonable accommodation. The APPs source their drugs from private pharmaceutical companies. Sometimes they receive a bonus (either cash payment or free samples) based on drugs ordered from the company. The unit cost per injection comes to approximately Rs1.2 while commonly dispensed tablets such as analgesics cost Rs47 per 1,000. The saline drip, administered approximately once a month, is charged at Rs50-Rs100 and costs Rs40.

APPs in rural areas typically charge Rs10-20 per visit with the understanding that the consultation is free and the patient only pays for medication. APPs in semi-urban areas tend to charge more. All practitioners report offering free (or reduced price) services for the very poor and higher charges for those that wish to jump the queue (usually Rs30-Rs50).

Demand for APPs varies a great deal between particular provider, we estimate that each APP treats between 20 to 50 patients per day providing a comfortable monthly income of between Rs8,000-Rs20,000.

In the long term, once every village has access to effective medical care, these APPs or "quacks" will gradually disappear. In the short term, it is important to differentiate between those that can play a productive and useful role in health care provision and those that should be barred from continuing to practice medicine or at least ignored by the health system if it proves impossible to close them down.

Some suggestions on APPs

- Undertake an in-depth survey of APPs in Karnataka: Although this brief study has shed some light on the operations of the average APP, it is not enough information from which to draw strong conclusions. A representative facility survey of such private practices would reveal the illnesses treated, medical practices, training levels, tariffs and reasons for high demand.
- Consider franchising or accreditation: APPs are currently unregulated and although
 their operations are illegal it is impossible to shut them down. An alternative method of
 improving quality is to accredit those that go through basic training either publicly or
 privately provided. Training at the very least could cover safe needle protocols.
 Accreditation can also take the form of social franchising whereby selected APPs are
 reoriented to provide health care products and services that require limited training to
 deliver effectively (see below).
- Public education: The majority of APPs are quacks often offering a cure that may be
 worse than the illness. The public need to be informed that such injections, saline drips
 and tablets offered by non-qualified practitioners are at best useless and at worst may
 expose them to HIV/AIDS, hepatitis and other diseases. A related public education
 campaign could increase awareness of the most serious illnesses and provide information
 on their treatments.

Non-government Health Care Facilities

The non-government sector represents a large and growing market segment. According to a 1996 survey there were 1,709 non-government health care facilities with a total complement of 40,900 beds in Karnataka in 1996.⁶ A more recent audit in 2002, puts the figure at 1,831 confirming that the private sector represents a steadily growing health care segment.⁷ This compares with 38,479 beds in the public sector in 1998.⁸ In 1996, the majority of non-government facilities were general hospitals (71%) while 26% were MCH facilities. The remainder of the facilities specialized in ophthalmology and oncology.

The non-government sector is dominated by small, individually-owned facilities. Charitable trusts and registered societies own only 6% of facilities but account for 30% of total bed strength. Individuals and partnerships own over 90% of facilities and account for 60% of the total bed strength. This information is presented in the table below.

Table 5: Karnataka, Distribution of non-government facilities by ownership

Ownership	Institutions		Bed Stre	ength
	Number	Percent	Number	Percent
Charitable Trust	68	4.0	4,326	10.6
Registered Societies	42	2.5	7,945	19.4
Religious Mission	17	1.6	2,725	6.7
Limited Company	19	1.1	1,380	3.4
Individual	1,425	83.4	21,066	51.5
Individual Partnership	128	7.5	3,458	8.5
Total	1,709	100.0	40,900	100.0

Source: Department of Health and Family Welfare, Government of Karnataka, 1996

Facilities with less than 30 beds account for 84% of the number and 40% of the beds in the non-government sector. Only 3.3% of hospitals have more than 100 beds but they account for 37% of total bed strength. The bed occupancy in the non-government sector hospitals is 63% with occupancy generally higher in larger hospitals.

Table 6: Non-government facilities by size

Bed Strength	Institutions		Bed Strength	
	Number	Percent	Number	Percent
0-9	610	35.7	3,639	8.9
10-29	829	48.5	13,055	31.9
29-49	153	9.0	5,509	13.4
49-99	61	3.6	3,559	8.7
>100	56	3.3	15,138	37.0
Total	1,709	100.0	40,900	100.0

Source: Department of Health and Family Welfare, Government of Karnataka, 1996

⁶ Government of Karnataka, 1996.

Report 12 A., Government of India, Income Tax Department.

⁸ Ministry of Health and Family Welfare, Health Map of India 1998.



The poor form almost half the users of private hospitals. The 1996 government report also showed that nearly 46% of the users of non-government facilities have family income below Rs1,000 per month (or less than US\$1 per day). A further 37% have family income between Rs 1,000-3,000.

Charges vary considerably between non-government hospitals. Those that operated by charitable institutions generally charge the lowest fees closely followed by hospitals run by individuals or partnerships, while hospitals run by limited companies generally more than twice as much for the same service. Non-government facilities tend to alter their charges according to ability to pay with the highest rates found in cities with a population over 1 million and lower rates in rural and semi-urban locations. Most are willing to offer concessionary or free services for the poor especially for consultations.

Table 7: Concessionary rates at non-government facilities

	Consultation	Diagnostic	Treatment
Full charge	58.1	82.8	76.3
Concession	23.7	11.2	16.4
Free of charge	18.2	6.0	7.4
Total	100.0	100.0	100.0

Source: Department of Health and Family Welfare, Government of Karnataka, 1996

Initial observations from field visits to non-government facilities

Regulation: Straddling the primary and secondary levels, there exist many small private clinics / hospitals with between 0-30 beds. Although some of these facilities are called private nursing homes, in practice they offer mainstream health care services. The proliferation of smaller facilities and terminology associated with them is driven in part by the fact that the standards developed by the Bureau of Indian Standards (BIS 1992) only apply to hospitals over 30 beds. In theory smaller private facilities have been regulated by Indian Consumer Protection Act of 1986 and the Karnataka Private Nursing Home Act of 19976 (amended 1979). This latter Act is now being superceded by the Karnataka Private Healthcare Establishments Bill 2000 which is yet to be approved. In practice, private facility owner/operators report that there is little or no regulation other than occasional checks to ensure that the personnel in the operating theatres are qualified MBBS doctors.

Collaboration with the public health system: Many non-government health facilities are located close to public facilities. Taluka and District hospitals especially act as medical hubs that attract private facilities. Private facility owners report that they collaborate closely with government facilities especially on vertical programs. Government provides free family planning products e.g. IUD, oral pills, condoms. Many private nursing homes immunize children (charging Rs66 for MMR and less than Rs30 for other immunization doses) a key role of the primary health care system. They also undertake an increasing number of deliveries. (charging approximately Rs2-3,000 for delivery and Rs250 for ultrasound although this varies widely by facility). Despite charging for services that are, in theory, available for free (often just across the road) in the public sector, their facilities are heavily utilized even by the poor. Discussions with patients

reveal that they value the attitude and availability of the staff and the quality of the care offered at these facilities. However, public officials claim that the poor record keeping and inferior diagnostic practices in private facilities is hampering government efforts to reduce the prevalence of communicable diseases.

Non-government health care services: Unsurprisingly the private sector, including the NGO run facilities, is focused on curative health care with largely private good characteristics. There is little standardization in the non-government sector with the levels of service and prices charged varying considerably in response to demand. Moreover there are no uniform procedures because standard protocols vary widely by medical college.

Non-government health care financing: It is estimated that more than 95% of payments for non-government health services are out-of-pocket. Some patients seeking treatment at non-government facilities are covered by Mediclaim insurance. However, Mediclaim does not cover deliveries and only includes formal sector (i.e. non-poor) employees. Given the evidence that many poor people are forced to sale assets and/or borrow money to pay for medical treatment, there is an unmet demand for health insurance in the rural areas. Early experiments currently being conducted in Karnataka are presented in the following section.

Obstacles to the establishment of non-government facilities: Discussions with non-governmental health care providers revealed that the two largest obstacles to establishing a facility are (i) finance, and (ii) availability of land. Access to finance is always an issue for small and medium sized businesses. In Karnataka, in particular high interest rates recently upto 18.5% have hampered all business development. Access to land is also an issue with non-government facilities based on half as much land as their equivalent government counterparts.



V Primary Health Care Seeking Behavior

Overview of Primary Health Care-Seeking Behavior

The poor can turn to a variety of health care providers based in different facilities including; Auxiliary Nurse Midwives (ANMs) often based in a primary health sub-center, public nurses and doctors at the PHC, Community Health Center (CHC) or the larger Taluk or District Hospitals. They can also seek care from clinics run by NGOs, Medical Colleges or private sector clinics operated by qualified doctors or unqualified practitioners, often termed Rural Medical Practitioners (APPs). Although the cost is often higher, poor individuals also seek care at private nursing homes and private hospitals as illustrated above.

The private sector has become the dominant provider of ambulatory care both in rural and urban settings. Evidence on patterns of resort for ambulatory care reveal that 66% of ambulatory care in rural areas and 75% in urban areas is provided by private sources.

Table 8: Patterns of resort for health care in India

Facility Type	Ambulatory Care		Ambulatory Care Hospitaliza	
	Rural	Urban	Rural	Urban
All Public Sources	31	24	45	43
Public Hospital	11	17	40	42
PHC/CHC	15	3	5	1
Dispensary / MPHW	3	1	1	0
All Private Sources	64	75	55	57
Private hospital	27	34	50	52
Charitable HCI	1	2	4	4
Private doctor	35	38	1	1

Source: India NFHS-2, 1998/99 and NSS 52nd Round 1995/96.

The evidence also illustrates that the PHCs are failing to provide a common point of first contact for ambulatory care-seekers in rural or urban settings. In urban areas, the public hospital seems to be substituting for the PHC although this does not represent a rational allocation of resources. It is a common practice for patients in urban and often in rural areas to travel to a higher level public hospital by-passing the primary level care providers in their vicinity. This practice results in overloaded secondary level public hospitals.

The private sector has become the dominant provider of in-patient care in India. Table 8 above shows that the private sector has become the most important provider of in-patient care 55% in rural areas and 57% in urban areas. This proportion has risen steadily throughout the 1980s and 1990s. The size and growth of the private sector nationally is mirrored in Karnataka.

Rural Health Care Seeking Behavior in Karnataka

Rural communities have a preference for allopathy over traditional medicine. Surveys in rural Karnataka show that between 70-80% of respondents have a preference for allopathic medicine. A minority have a preference for homeopathy, traditional remedies and ayurveda.⁹

Rural communities prefer to visit private doctors or quacks than government doctors. Although limited in scope, a recent survey indicated that less than 6% of rural households visit a government allopathic doctor during periods of illness while upto 90% of households visit a private allopathic doctor (see Table 9 below). The survey also illustrated that a significant proportion (34%-44%) still rely on quacks with the corresponding dangers to their health.

There are several reasons that rural communities chose private over public care. An important factor appears to be the way they are treated. In Narsipur and Bailhongal Taluks more than 70% of patients that visited private facilities expressed their satisfaction with their treatment as opposed to less than half those visiting public facilities. For those that visited private allopathic facilities, distance to the site was not a major issue and a majority of individuals preferred formal private facilities over public facilities despite having to travel further to seek care. Poorer households and patients with minor ailments are more likely to visit quacks but still report a high degree of satisfaction with their treatment.

Table 9: Rural Karnataka, Source of Treatment During Illness

Treatment	T. Narsipur	Bailhongal
Private allopathic doctor	89.2	58.1
Government allopathic doctors	2.1	5.8
Quacks	43.8	34.3
Traditional medicine	68.5	19.3
Dispensary/chemist	13.9	13.2
Rural Health Paramedics	8.0	3.7

Source: Centre for Population Dynamics, 2000. (multiple answers).

Antenatal Care-Seeking in Rural Karnataka

Rural women are twice as likely to visit a private rather than a public doctor for antenatal care. A survey of antenatal morbidity and care-seeking behavior in rural Karnataka clearly illustrated that although pregnant women often have contact with an ANM, they also seek the care of a qualified doctor. ¹⁰ A very small proportion (10% or less) will seek care at the local PHC. A similar proportion will seek care from another provider (either traditional healer or rural medical practitioner). A plurality, 40% or more will visit a private doctor. This is often 2-3 times as high as the proportion that visits a government doctor.

⁹ Baseline Survey conducted in T. Narsipur and Bailhongal Taluks by the Centre for Population Dynamics, 2000.

Antenatal Care, Care-seeking and Morbidity in Rural Karnataka, India: Results of a Prospective Study, Matthews et. al., Asia-Pacific Population Journal, June 2001.



These findings are confirmed by another study of young mothers in Karnataka which found that only 20% of consultations were with government doctors. Moreover this study also indicated that the total cost incurred per visit to government doctors was only slightly less than the cost of a visit to a private practitioner (Rs43 versus Rs47).¹¹

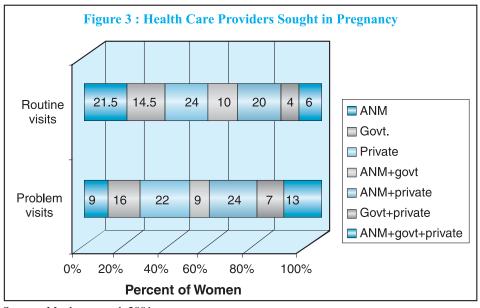
Table 10: Antenatal morbidity and care-seeking behavior in rural Karnataka

Antenatal Problem	Percentage affected	Percentage sought	Percentage of women seeking care by service provider among all those who sought care.				
		treatment	ANMs	РНС	Govt. Doctor	Private	Other
High fever	5.6	94.0	13.3	6.6	20.0	40.0	20.0
Abdominal pain	22.6	78.3	12.7	10.6	27.6	46.8	2.1
Nausea	10.9	77.4	16.7	4.2	20.8	58.3	
Backache	6.7	63.2	16.7	8.3	8.3	58.3	8.3
Vaginal discharge	4.2	91.6	18.2			72.7	9.1
Other obstetric	5.6	62.5	20.0		20.0	50.0	10.0

Source: Matthews et. al. 2001

It is important to note that the type of care sought will vary with the type of illness or discomfort that the patient is experiencing. Patients often seek care from a combination of health care providers including both the public and private sectors.

A recent study on antenatal care-seeking behavior revealed that over 55 percent of pregnant women had contact with an ANM either exclusively or alongside contacts with a public or private doctor. Women who experienced problems were much less likely to rely on the ANM alone. These women sought out private sector providers (48%), much more frequently than their public sector counterparts (30%).



Source: Matthews et. al. 2001.

Health seeking behaviour of women and costs incurred, Bhatia and Cleland in S. Pachauri (ed.) *Implementing a Reproductive Health Agenda in India*, 1999.

The study went on to show that government health care personnel provided tetanus toxoid immunizations and iron and folate supplements, but carried out very few other recommended procedures. Private practitioners recorded their weight and checked their haemoglobin and urine. In this case at least, the women's preference for private sector care is rational given the superior level of care provided. However, few providers, in either the public or private sectors, gave any advice or information on antenatal care.

Initial observations on care-seeking behavior in Karnataka

- There is a high demand for private ambulatory and in-patient care in rural Karnataka. Given the socio-economic characteristics of rural Karnataka this is likely to translate into a corresponding demand for rural health insurance.
- PHCs in rural areas are not playing the role that they were intended to. A very small proportion of rural patients seek care from government run PHCs.
- Despite their epithet, quacks are still a first port of call for many patients in rural areas.
- The public and private sectors are not necessarily competitors and in some cases play a symbiotic role.
- Promising improvements to health outcomes would focus on improving the responsiveness of the public sector, improving the quality of the private sector (especially the APPs) and reducing the out-of-pocket expenses associated with both.



VI Public-Private Partnerships

Co-opting the Private Sector to Run PHCs

Primary health centers form the backbone of primary health care provision in the state. The efficient operation of PHCs could play a central role in improving health outcomes for the poor. Unfortunately as explained above, PHCs are not currently fulfilling this role and run the risk of becoming irrelevant in many districts. Until recently, all PHCs were run by the government. However, inadequate budgets have resulted in shortages of essential drugs and equipment, key positions remaining unfilled for many months and generally low levels of service provision. In an attempt to rectify this situation, GoK has embarked on an innovative experiment in coopting the private sector to operate failing PHCs in partnership with government.

Government is exploring methods to partner with the private sector to run the PHCs. Government's current partnership model (highlighted in Box 1 below) is to identify the worst performing PHCs and allow reputable medical colleges, NGOs or private sector trusts to come forward and take them over. Such agents are required to provide 25% (recently increased from 10%) of the PHC's operating costs while government provides the remaining 75%. Government also provides the PHC with the usual budget for drugs (approximately Rs 75,000 or \$1,600 per annum).

The current model is based on a rigid MoU which does not allow government to capture the full potential of the private sector. Although the new operators are required to provide a substantial part of the operating budget, they are not allowed to levy any user-charges that are not normally levied in a public facility. The NGO operators have some flexibility in recruitment or retention of existing staff but operate the PHC strictly within the confines of the government service, i.e. are required to pay salaries and benefits that conform to government norms and take part in all the national and state level health and family welfare programs. Moreover, all staff recruited from outside the public system become liabilities of the agency. Without any additional budget for drugs or equipment, they are also required to ensure that there are no shortages in essential medicines.

Within this operational context, non-governmental actors are permitted to operate the facilities for a period of five years, the first two-years of which are considered a probationary period. During the entire time they remain under close government and Zilla Panchayat scrutiny. Following a successful review of their operations in the final year, government can renew the agency's contract.

Pros and Cons of the Current Model

The current model has several advantages:

- (i) Avoids duplication of infrastructure: It allows interested NGOs to operate within the existing public health care system. This avoids the duplication of facilities and proliferation of programs that can often accompany NGO programs.
- (ii) Builds capacity: It augments national capacity and ensures that the NGO run facilities remain an integral and functional part of the public health system.

Box 1: "Handing over" PHCs to the private sector – the rules of the game

GoK has outlined the parameters that will govern the involvement of the private sector in PHC management in a document entitled, "Scheme for involving private medical colleges and other agencies in the management of PHCs".

The scheme is limited to medical colleges and bona fide NGOs with a solid financial and managerial track record. Interested agencies submit their proposals, to manage up to three failed PHCs (i.e. those that are in the bottom half according to government scorecards) through the Zilla Panchayat. A selection committee composed of key government health officials, chaired by the Commissioner HFWS evaluates the proposals. If successful, the agency would enter into a contract with the Director HFWS with the following provisions;

- The agency takes full responsibility for providing all personnel
- Staff at the PHC become employees of the agency and are appointed in accordance with government staffing norms e.g. regarding salary levels and minimum qualifications.
- The agency has to maintain the existing staffing levels sanctioned by government.
- The agency is responsible for the implementation of all National and State Health and Family Welfare programs.
- The agency cannot charge for diagnosis, treatment or drugs unless sanctioned by government and must produce audited accounts annually.
- The agency takes on the responsibility for the maintenance of PHC assets.

For its part, the government would be responsible for:

- Reimbursing upto 75% of the salary costs.
- Reimbursing water and electricity charges upto a maximum of Rs1500/ month.
- Paying Rs25,000 per annum towards maintenance of the buildings.
- Providing a budget for drugs (at present set at Rs75,000 per annum).
- The DHO continues to monitor the PHC, while a coordination body including the Commissioner HFWS and the CEO of the Zilla Panchayat effectively act as the board of the PHC with the power to issue administrative directions that are binding on all concerned.
- (iii) Cost-effective for the state: It reduces the burden on state resources by tapping the additional resources of the NGO sector. Private medical colleges are also ideal candidates in many ways, as they can not only run PHCs but also use the facilities to train their young doctors and thereby subsidize the costs of running the PHC through course fees.
- (iv) Is largely self-regulating: NGOs that are willing to take on this responsibility will only be driven by the desire to improve health outcomes and will thus require little oversight.

On the negative side, the MOU does not allow government to:

(i) Capture the improved management practices of the private sector: The rigid structure of the memorandum of understanding (MoU) does not allow the private sector to run things differently or introduce more efficient management techniques.



- (ii) Improve health outcomes: Effective contracting arrangements with the private sector usually involve focusing on the outputs and outcomes that the private sector are responsible for, rather than strictly specifying the inputs that are required. All stakeholders, including government should be more interested in ensuring that the proportion of immunized children rises and the IMR and MMR fall, rather than requiring the PHC to employ a certain number of sweepers at a certain salary level.
- (iii) Recruit the for-profit private sector: The requirement that the agency must bring not just expertise but also additional funding, when combined with the ban against levying user-charges effectively rules out the for-profit sector.

PHC Partnership Experience to Date

The current partnership scheme has experienced limited uptake. Since the scheme was launched three years ago, only six PHCs have been successfully adopted, by a total of three NGOs and one medical college. This falls far short of government's target to handover upto 100 PHCs (out of a total of 1,685). Given that the NGO sector accounts for less than 1% of health care services in Karnataka, limiting the scheme to NGOs and medical colleges implies that the scheme will not be capable of being scaled up and will not therefore have a significant impact on state-level health outcomes.

PHCs that have been taken over are operating successfully. As indicated above, government measures successful operation by viewing the inputs rather than the outputs. Therefore, government can only report that the PHCs that have been taken over remain well-staffed and supplied with drugs. NGO operators, however, have measured their own performance against state-wide averages (see Table 11). Although it is still too early to review evidence on health outcomes.

Table 11: PHCs in the Private Sector, 2003.

Indicator	Gumballi (%)	Thithimathi (%)	Karnataka State (%)
Complete ANC coverage	80	82	70
Deliveries by TBA	100	94	80
Immunization women	100	100	85
Immunization children	100	100	65
Couple protection rate	80	69	49

Source: Government and NGO Partnership in Primary Health Care, Dr. Sudarshan.

NGOs have raised additional sources of financing to support the operation of PHCs. On average, PHCs in the public sector are operated on an annual budget of Rs 1 million and NGO operators report that they supplement this with a further Rs 4 lakhs to be able to meet government guidelines. In order to meet this additional expense, NGOs rely on their endowments and are increasingly examining alternative options for self-financing such as the production of herbal medicines and invitation to patients and visitors to make voluntary donations.

NGOs have introduced innovative health improvement initiatives. One striking feature of the PHCs that have been taken over by NGOs is their focus on community empowerment for

better health. Such initiatives are also regularly adopted by NGOs active in the field that are not involved in running PHCs. In every case, the NGO starts with the formation of a functional village health committee. They also promote self-help groups and microcredit groups. The former are often involved in training female villagers in the production and use of herbal medicines and improved health and nutrition practices. The latter increase the community's access to sources of funds for health care treatment (see Box 2 for more examples of innovative

Box 2: Karuna Trust Innovations in PHC Operation

- Training tribal girls with a grade 7 pass to become ANMs at tribal sub-centers (not recognized by the Nursing Council).
- Introducing mental health program at the PHC.
- Introducing dental health at the PHC.
- Integrating rehabilitative care in addition to the usual curative, preventive and promotive.
- Addressing specific problems endemic to the area e.g. sickle cell anemia and hot water epilepsy.
- Promotion of traditional medicine (through program centered on 20 herbs for primary health care).
- Integration of ayurveda and homeopathy.
- Introduction of community health financing.

practices introduced by the Karuna Trust) although it is not clear that such savings schemes are different to regular micro-finance schemes or that health care NGOs have a comparative advantage in establishing such schemes.

NGOs are focused on health outcomes. NGOs have carried out baseline surveys and impact evaluation studies to ensure that they have a beneficial impact on health outcomes. They have also conducted medical and social audits of maternal and infant deaths. An over-riding interest in health outcomes rather than processes is often matched with an integrated approach to health care that stresses good hygiene and clean water and sanitation, all important ingredients to improved health outcomes.

Suggestions for Improving Current Partnership Arrangements

Given government's own target of contracting out 100 PHCs to the private sector and given the limited scope of NGOs in the state, it is worth exploring alternative methods by which to attract the broader private sector. Following are some initial suggestions that could be expanded on as appropriate. Government could consider introducing some or all these measures together once their implications were carefully considered and following a stakeholder consultation prior to implementation;

- Provide 100% of the funding: Providing all the funding would imply that government is responsible for running the PHC. In return for providing the funding, government would seek the managerial and technical know-how of the private sector. This measure would immediately expand access to NGOs and the private not-for-profit sector that do not have the additional funds to run PHCs under the current model. It could also attract the for-profit-sector that are interested in management contracts to run the PHCs efficiently or are interested in the potential of indirect potential benefits of the PHCs.
- *Contract for outcomes:* Rather than contracting on the basis of inputs, government should focus on outcomes. As health outcomes such as local IMR and MMR can take several



years to change in the short term, government can set performance targets based on outputs such as number of children immunized, number of pregnant women provided with full ANC coverage etc. The targets should be agreed upfront with the private sector and include a core list for every PHC and a subsidiary list of issues relevant to particular PHCs. Establishing a baseline and regular reporting should be the government's responsibility, although again this can be contracted out to the private sector.

- Provide for greater flexibility: In order to gain the full benefit of contracting with the
 private sector, government should give private operators increased flexibility to run the
 PHC as they see fit as long as they are held accountable for improving health outcomes.
 This implies that the private sector should be allowed to hire and fire staff as per the
 requirements of PHC operation rather than a standard staff complement. Private operators
 should of course still be required to play their role in all relevant national programs.
- Outsource geographically contiguous PHCs: Current NGO operators claim that once
 an effective PHC is established, patients seeking care from areas outside the official
 catchment area will turn up for treatment. This can be overcome to some extent by
 bundling several PHCs in a geographic area together and offering them to the private
 sector in a single contract. Alternatively government can consider offering PHC budgets
 based on the demand for services.
- Increase community participation: This is a key ingredient and although current NGO
 operators have already adopted community participation techniques it will be important
 to institutionalize this practice in expanding the contracting model to the broader private
 sector. Satisfaction surveys can be undertaken by independent organizations and could
 feed into the overall evaluation process.
- Involve the private sector in planning and policy-making: In order to capture the full potential of the private sector they can be co-opted onto policy-making boards and into the planning processes of the Department of Health.
- Consider introduction of user charges: User charges are already a reality within the primary health care system. Introducing them officially, perhaps with an exemption for the poor (e.g. holders of Below Poverty Line cards or a better indicator of economic status) would serve several purposes; (i) it would provide an incentive to the PHC to expand coverage, (ii) it would attract for-profit providers, (iii) it would decriminalize the practice and ensure that the resources were used appropriately, (iv) it would augment the PHC budget, (v) it would provide an incentive to ensure services responded to local needs, (vi) it would give the community greater voice in the operation of PHC services.

VII Innovative Insurance Schemes

Introduction

As the private sector provides the majority of inpatient and outpatient health care services even in rural areas, and there are few insurance schemes, it is not surprising that more than 90% of health care costs are met by out-of-pocket expenses. The current situation results in large numbers of the poor falling into poverty when they are hit by illness. An effective insurance scheme with wide coverage and affordable premiums would go a long way to reducing out-of-pocket expenditures for the poor. However, to be sustainable such a scheme would have to be financially viable and therefore could be run effectively by the private sector.

It is estimated that less than 9% of the Indian workforce is covered by health insurance through the Central Government Health Scheme, Employee State Insurance Scheme and Mediclaim. The proportion that is covered mostly belongs to the organized urban sector. For instance, Mediclaim largely covers formal sector workers (95%) including government officials with a high level of service. The vast majority of its members (75%) live in Bangalore and outreach to the rural areas and informal sectors is insignificant. Thus there is great scope for pooling of risks and resources through a well-managed and well targeted insurance scheme. A number of government and NGO-led initiatives are experimenting with alternative methods of addressing this issue including; (i) UNDP/Karuna Trust, (ii) Farmers cooperative scheme (iii) Jan Arogya (GOI) scheme. Each of these schemes in addition to the Mediclaim scheme is discussed in more detail below.

In assessing these pilot schemes it is not enough to examine their success or failure. To be truly effective they must be replicable either as part of the public health care system or by the private sector on a for-profit basis. Although the NGO sector is making a valuable contribution to health outcomes in the state, it accounts for less than 5% of the whole system and there are not enough qualified NGOs that can scale up successful schemes.

UNDP / Karuna Trust Pilot Scheme

The National Insurance Corporation (NIC) has teamed up with UNDP and the Karuna Trust to pilot a community-based insurance scheme in B.R. Hills. The scheme is aimed at encouraging vulnerable groups (members of schedule castes and scheduled tribes in the community) to take advantage of public health care facilities. By reducing the costs of health care at public hospitals, it is hoped that the scheme will encourage the increased use of such services. The pilot scheme was also intended to introduce members of the community to the idea of health insurance.

A baseline survey conducted during the design phase of the scheme gathered information on the demographic and health characteristics of the population. It revealed that individuals pay about Rs150 per day in direct and indirect costs during periods of illness (See Table 12). The survey also showed that the costs of treatment for patients aged 5 and under was about half this amount, largely due to the fact that there are no lost earnings and/or travel costs for children so young. Interestingly the costs of treatment at a private hospital were only a little higher at Rs163 while treatment at a "quack" or chemist shop was significantly higher at Rs295 per day. The higher costs at both private facilities and quacks were almost all due to the increased costs



of consultations and drugs. The largest part of the costs was made up of lost wages and the cost of drugs. These findings informed the design of the scheme.

Coverage under the scheme costs Rs30 (US\$0.7) per person per year and entitles beneficiaries to receive payments for in-patient treatment in selected public hospitals. Those requiring in-

patient treatment are paid Rs50 per day to cover transport costs to the hospital as well as lost wages. The scheme also pays the hospital an additional Rs50 per day to cover the costs of scarce medicines. At each participating hospital, a member of the Karuna Trust verifies the members' eligibility and makes the cash payments. The maximum payment per year is fixed at Rs2,500 (US\$55) for a 25 day stay in hospital. The scheme is administered by the National Insurance Company (NIC) a large public insurance company.

The scheme is subsidized by the UNDP. The subsidies go towards the premiums to be paid by the poor.

- (i) SC/ST members pay nothing.
- (ii) Below the poverty line (BPL) members pay between Rs10-R15.

Table 12 : Costs of treatment at government hospital in rural Karnataka*

Items	Rs.	Percent
Consultation	193	11.9%
Drugs	180	11.1%
Diagnostics	153	9.5%
Patient travel	132	8.2%
Escort travel	143	8.8%
Additional prescriptions	130	8.0%
Wage loss of escorts	290	17.9%
Wage loss of patient	182	11.3%
Speed money	114	7.1%
Other	118	7.3%
Total cost	1617	100.0%
Average cost per day	147	

* T. Narsipura Taluk

Source: Community Health Insurance – Organization of apilot project, Center for Population Dynamics.

(iii) Above the poverty line (APL) members pay the full Rs30.

Interesting features of the scheme

- Insurance to use public facilities: It recognizes the reality that public facilities are not free and makes payments to the hospital on behalf of the patient. Some of the Rs50 per day payment to the hospital will be used to cover formal payments but the majority will cover speed money and money to purchase drugs that should be provided free of charge. Moreover the insurance can only be used if the patient receives treatment at certain designated public hospitals in the nearby area and therefore does not encourage competition between the private and public sectors. There is evidence that some of those insured are still using private health care because of the superior service they receive.
- Compensates the sick for indirect costs of illness: Most of the poor cannot afford to take a single day away from their work. Even relatively small payments for transport to and from the health care facility (often Rs20-Rs50) can deter the poor from in-patient treatment.
- Covers individuals and not families: The scheme is based on individual coverage rather
 than coverage of the whole family. It is felt that allowing individuals to join would
 encourage people to come forward. However, users of the scheme may decide only to
 enroll wage-earning individuals or may decide to discriminate against female members
 of the household.

- Only covers in-patient treatment: By only covering in-patient treatment and fixing the
 maximum and daily benefits receivable the scheme effectively reduces the possibility
 of corruption. However, it does not encourage the poor to use primary health care
 outpatient services. Minor ailments that could be treated effectively with early detection
 could therefore go undetected. There may even be an incentive for those with minor
 ailments to wait for treatment until they become serious enough to warrant in-patient
 care.
- Community involvement: The scheme empowers the local community and reduces administrative costs through the creation of village health committees at both the District and Taluk levels. Both committees meet once a fortnight to review the number of beneficiaries registered, issue of insurance policies, settling of claims, accounting for payments to hospitals and oversight of the hospital revolving funds.

Results to date

All of the SC/ST members of the community were enrolled quickly in the scheme taking advantage of the membership without having to pay a premium. A similar number of BPL individuals also decided to pay the subsidized premium and join the scheme. However, only 2% of the total group are from the non-poor i.e. those above the poverty line who were required to pay the full Rs30. In total the scheme has covered about 25% of the population in its first year of operation. Bed occupancy under the scheme has gradually increased to approximately 8 patients per day.

In its first four months of operation the scheme took in Rs 25 lakhs in premiums but only paid out Rs 2.5 lakhs. This is unsurprising given the relatively high premiums at Rs30 and the ceiling on the maximum annual payout which is Rs2,500. The managers of the scheme believe that all the community can be covered on a sustainable basis for just Rs10 per year (US 0.25) an amount which is judged to be affordable by even the poorest members of the community. Alternatively the premium could remain at the current level and the benefits could be expanded to cover outpatient care. The managers of the scheme are experimented with a range of possible options for the future.

Farmers' Cooperative Insurance Scheme

Government is piloting a number of similar schemes. In Karnataka government launched a scheme in November 2002 entitled "Yashaswini" under which it is aiming to cover 2.5m farmers that form 90% of the cooperative movement. Members of farming cooperatives are offered Rs 1 Lakh coverage for catastrophic illness. The premium payable is Rs75 per year, of which the farmer pays Rs60 per year (in monthly installments of Rs5) and government pays the remaining Rs15 per year.

The design of the scheme is informed by a survey that showed that farmers suffered from heart diseases, bleeding stomach ulcers, burst appendix, gall stones, enlarged prostrate, cataracts and fractures. Therefore coverage under the scheme includes treatment for all such diseases. Members of the scheme can seek treatment at any one of 67 private and public hospitals participating in the scheme.



The scheme's success relies on the hospitals offering to set low rates for certain major operations in exchange for increased volumes. Many hospitals are running at very low occupancy rates (10% or lower) due to the high costs of care at their facilities. It also relies on the fact that only covers surgeries and only a small fraction of farmers go in for operations.

Jan Arogya Scheme

The Government of India (GOI) is piloting a nation-wide Jan Arogya insurance scheme. For a premium of Rs365 (or Rs 1 per day), the scheme covers wage-earning members of the family. There is also an option to cover a family of upto 7 members for Rs1.5 per day and a family of more than 7 for Rs 2 per day. The scheme covers medical expenses up to Rs.30,000 towards hospitalization, a cover for death due to accident for Rs.25,000, and compensation due to loss of earning at the rate of Rs.50 per day up to a maximum of 15 days. To make the scheme affordable to BPL families, the Government has decided to contribute Rs.100 per year towards their annual premium. This scheme is effectively targeted to cover care at small, low-cost private nursing homes and/or government facilities.

Challenges to the scheme include educating the rural population about the importance of healthcare which will be particularly difficult considering the low literacy levels and the traditional mindset.

Table 13:	Comparison of	existing and	l pilot	schemes

Scheme	Premium	Benefit	Maximum	Coverage
Mediclaim	Depends on characteristics	Rs15,000-500,000	Rs500,000	Formal sector
UNDP/Karuna	Rs30	Rs100 per day (inpatient)	Rs2,500	All (poor subsidized)
Yashaswini	Rs75	Only in-patient	Upto Rs100,000 of Rs 15)	Farmers (subsidy
Jan Arogya	Rs365 (individual) Rs547 (family <7) Rs730 (family >7)	InpatientAccident Lost wages	Rs30,000 Rs25,000 Rs50 / day	All (poor subsidized Rs100)

A comparison of the various insurance schemes being piloted raises the following issues:

- Coverage of outpatient care: The schemes do not address many of the issues raised by
 the review of the burden of disease. None of the schemes cover outpatient care. Moreover,
 basic dental and eye care is not covered. Most of the schemes implicitly or explicitly
 believe that outpatient care is much more affordable than inpatient care and is much
 harder to verify.
- Maternal health: Targeting individuals and or wage earners is likely to discriminate against women who spend a lot of their time in non-wage labor or childcare functions. The maternal mortality rate at 400 per 100,000 births is very high and normal delivery is the 5th leading outpatient condition in Karnataka but would not be covered by any of the schemes. Moreover obstetric care other than abortions and normal deliveries is the

leading inpatient condition in Karnataka. Such a situation should prompt designers of future schemes to consider special schemes targeted at vulnerable women.

- Child Health: As highlighted above the immunization rate in Karnataka at 60% is very
 low and contributes to the continued prevalence of a number of communicable diseases.
 An insurance scheme or voucher that allowed (vulnerable) mothers to get their children
 immunized either at the PHC or an accredited private sector provider could play a role
 in increasing this rate if access and cost are the inhibiting factors.
- Subsidizing schemes: Many of the schemes include a subsidy element. However, the
 subsidies are all designed with reference to the individual as the unit of analysis i.e. are
 based around the idea that government should be helping the poor. An alternative method
 of targeting subsidies would be to design subsidized schemes that covered only health
 care services with a public good element e.g. immunizations, communicable diseases,
 health education.
- Catastrophic coverage: To some extent all the schemes are aimed at providing catastrophic
 coverage to the individual. While it is true that many vulnerable individuals and their
 families fall into poverty as a result of serious illness it does not follow that public
 health care resources should be allocated to cover the costs of secondary or tertiary
 treatment of such illnesses. Such schemes should be designed within the framework of
 a comprehensive health care expenditure review and health care financing plan.
- Involving the private sector: In theory the most efficient health care delivery and health insurance systems would allow the private sector to compete with the public sector on an equal footing. This would entail deriving accurate public sector unit costs for all major types of illness covered by the insurance scheme. If this information was available it could be used to cap payouts under the scheme, thereby reducing costs. It would also allow the private sector to bid effectively for patients. However, government officials currently have little idea of the unit costs of even the most basic treatments in the public sector. This is clearly an area that would benefit from increased government attention.



VIII Options to Achieve the Full Potential of the Private Sector for the Poor

Overview of the challenge

There is a huge unmet demand for improved primary health care interventions. Karnataka is a middle-tier Indian state with most state-wide health indicators mirroring those for the nation as a whole. Government is focused on reducing the IMR (58/1000) and MMR (195/100,000) as well as reducing communicable diseases (increasing the percentage of children immunized from the current 60% to 90% by 2020). In addition to these health statistics, more than half of Karnataka's children suffer from malnutrition. Improving primary health care services is key to improving these health indicators.

Improving health outcomes will depend on improving the quality, outreach and responsiveness of primary health care providers. In successfully discharging its stewardship role, Government will need to consider methods of improving the performance of PHCs including improved contracting arrangement for those that are contracted out and incentives to improve the performance of those that remain in public hands. Those that are "handed over" to the private sector will have to be monitored with comprehensive baseline surveys and performance based service contracts. Government should also consider allowing increased flexibility for the private sector to run the clinics within a tighter management contract in order to realize the potential gains of private sector management. Alternative funding mechanisms and potential user-charges for the non-poor should be explored to allow the current experiments to be scaled up.

Government can consider scaling up the successful experiences of community health care financing. More than 70% of those that seek private sector health care are forced to take out loans or sell their productive assets to meet their expenses. Almost one in four Indians that are hospitalized fall into poverty as a result of their medical bills. Reducing out-of-pocket expenditures in a rational and cost-effective manner should be a government priority. There are a number of community health insurance schemes being piloted in Karnataka and elsewhere that have the potential of being scaled-up on a state-wide basis.

Government can consider methods of improving the quality of care provided in the private sector especially by the APPs. APPs are a first port of call for many rural dwellers. Many APPs although lacking in formal allopathic qualifications, have some medical training that can be built on to allow them to play a more productive role in primary health care provision. Government's current stance, at best to ignore them and at worst to shut them down is counterproductive. Instead government can consider providing them with basic training and/or accreditation to ensure that they are able to diagnose common illnesses and treat them effectively relying on public and private referral systems as appropriate. This could be accomplished within a social franchising framework (some suggestions are provided below).

Framework for Improved Private Sector Participation

This study is focused on three aspects of health care for the poor; (i) increasing coverage, (ii) increasing access and (iii) reducing cost. The diagram below illustrates how the various health care facilities and providers compare in terms of these three parameters. It is a stylistic way of thinking about health care service provision for the poor.

¹² National Sample Survey Organization 1998.



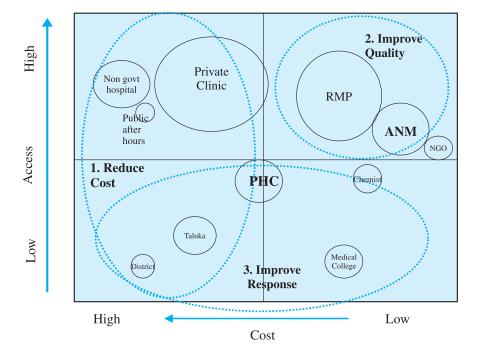


Figure 4: Cost and Access in Karnataka Rural Health Service Provision

The size of the bubbles in the diagram is roughly indicative of the market share of each provider. (In practice the market shares would vary with the type of treatment and type of morbidity experienced).

The diagram summarizes the current status of health care options available to the poor in Karnataka as discussed in detail above. An attempt has been made to categorize three possible areas of intervention to improve the current situation - these are represented by the dashed ovals. Essentially the three areas are;

- (i) **Reduce cost:** Options on the left-hand side of the diagram involve high costs. Firstly there are the high direct costs of private medical care and secondly there are the high costs associated with the time and transport to public facilities especially those at the higher levels. Given the high degree of out-of-pocket expenses, possible responses to this situation will involve innovative health insurance schemes and/or increasing government funding to the sector.
- (ii) **Improve responsiveness:** Public facilities are unresponsive to the poor for a number of reasons. Firstly, there are few incentives in the system to treat the poor. Poorly paid, public doctors often supplement their salaries through informal payments for treatment. They know that the poor will not be a profitable source of irregular payments and therefore are unwilling to treat them.
- (iii) **Improve quality:** Facilities that are available locally and cheaply to the poor especially the services offered by APPs fill a need for low-cost easily accessible services. However, as many APPs lack even the most basic medical training the quality of their care is on average extremely poor. In many cases the cure may be far worse than the disease.



As figure 5 illustrates, each particular provider category has its own strengths and weaknesses. Improving the potential of the private sector will depend on improving the quality of APPs and reducing the out-of-pocket expenses for the poor who wish to use private health care facilities. The table below highlights areas in which government policy-makers can search for suitable solutions.

Some suggestions for interventions in each of these areas is offered below. It is expected that these suggestions will be discussed in more detail later in 2003. Further dialogue can also take place during the preparation of the proposed Karnataka State Health Systems Development Project.

Whichever, suggestions are adopted; reform of the system will have to overcome powerful vested interests. A preliminary description of some of these issues is presented in the final section on the political economy of change.

Provider Cost Responsive--Quality ness RMPs High Low Low Private High Medium High Hospital Medium Low Medium **PHC** Public High Medium High Hospital

Figure 5: A provider comparison

Suggestions on Reducing Costs

Reducing costs for the poor could simply involve increasing government spending allocations to the sector. There is evidence that the budget for drugs at the PHC is inadequate given current demand. However, commenting on such a course of action is beyond the scope of this paper which is primarily focused on the potential of the private health sector.

An alternative method to reduce out-of-pocket expenditures is to establish affordable health care insurance for the poor (see section VII). Expanded coverage of successful insurance scheme pilots will go a long way to overcoming the reluctance of the poor to come forward for in-patient treatment. It is also worth examining additional pilots aimed at ambulatory care to encourage individuals to come forward at an early stage before in-patient care becomes a necessity.

Suggestions on Improving Responsiveness

There are many different ways of potentially improving the responsiveness of the public health care system. In general the most successful methods will involve changing the incentives embedded in the system for providers to offer quality health care to the poor.

- Improving voice: Health outcomes can be improved, if local communities have a greater input into the provision of public health care. At the moment, the local Panchayati Raj system of oversight is not working as the health management committees are not functioning or are not representing the poor. A simple way of overcoming this would be to introduce customer satisfaction surveys. If doctor's salaries and/or promotions were linked to, amongst other things, the outcome of such surveys they would have a greater incentive to treat the poor. As a large segment of the rural poor are illiterate they would not be able to complete questionnaires. Perhaps the feedback could be collected through periodic random exit interviews by independent assessors and a number of public sector patients. Alternatively the assessors could visit a representative number of poor individuals in the community to avoid self selection. Although such surveys can be expensive experience in other countries has shown them to have a tremendous impact on service delivery and quality.
- *Citizens' Charter*: An alternative method to engender improved services is to educate the public about their rights. Each PHC can post a patient's bill of rights. They could also be asked to post a list of drugs that are not currently available thereby eliminating the practice of extracting additional payments to procure drugs that health workers claim are not available. Government should consider these simple and cost-effective schemes to increase the transparency and responsiveness of the system.
- *Complaints line*: Another related idea is to institute a complaints bureau or build on the role currently being played by the Lokayukta. This function could improve responsiveness and reduce corruption providing the political will to support such an effort were forthcoming.
- Alternative payment methods: The current system whereby health care workers are paid
 regardless of work completed does not provide any incentive to deliver quality care.
 Effective alternative payment methods would include schemes whereby part or all of
 the public health care workers salaries depended on care provided and allowed the poor
 to choose between public and private providers to create competition within the system.
- Improving the current contracting arrangements: (see section VI on PPPs).
- Attracting health care workers to rural areas: Methods to incentivise qualified health care workers to locate to rural areas also need to be explored. These could include; (i) upgrading the role of the Auxiliary Nurse Midwives (ANMs), (ii) requiring trainee doctors to spend 1-2 years of their training period in rural areas, (iii) introducing diploma or "barefoot" doctors, (iv) altering the selection criteria for medical college to encourage more individuals from rural communities to qualify, (v) introducing a small user charge for the non-poor and/or (vi) simply improving the monitoring and enforcement mechanisms in the public sector.



Suggestions on Improving Quality

As demand for APPs remains high it is essential that the quality of health care that they provide is improved. There are several ways of doing this; (i) introduction of private or social franchising, (ii) expand training opportunities, (iii) increased education and awareness of the community.

Social franchising of health care is a way to achieve all these goals. Franchising is traditionally used in the private sector to expand outreach of a certain product, capture economies of scale whilst also ensuring quality. Several countries have experimented with health care franchising in recent years with significant success. DKT International has been actively promoting franchising in two poor Indian states for the past five years.

The idea behind DKT's programs is that if you can provide consumer goods such as coca cola to every poor village in the world, then it should be possible to provide pro-poor health care in a similar way by standardizing the product and the way it is delivered under a strong brand name. The idea is also based on the premise that there is significant demand from the poor, vulnerable groups use private health care facilities and APPs. However, there is little response from private providers especially the large network of APPs to provide pro-poor primary health care.

DKT's franchise is focused on the reproductive health of the poor. They have established a network of Titli centers that sell condoms and oral contraceptives. They also sell rapid test services for pregnancy, blood pressure and diabetes etc and offer counseling services. The centers are branded with the Titli butterfly logo and assure the end-users of the quality and service that they expect at a transparent and predictable price. The franchiser provides the retail owners (always at least one female APP) with training and products that are purchased in bulk and therefore provided at less than the usual market price. The Titli centers are also backed up by a network of clinics to which patients are referred. Each clinic has an ANM, administrator, counselor and lab technician.

The Titli center owners pay an annual membership fee equivalent of \$12 for these services. Membership fees cover the cost of advertising and marketing campaigns and franchise maintenance. The marketing campaigns are based on empowering the poor through education not just information on the franchise products but information more generally on family planning issues.

The focus on quality of care is ensured through a network of franchise supervisors that ensure transparent pricing, infection control, waste disposal and diagnostic facilities at the Titli centers and the clinics. In general the franchising model works as it is self-regulating. Membership in the franchise has the potential to improve outcomes for both the provider and the client. For the providers, there is the potential for increased revenue through increased volume and lower input costs as well as expanded range of services and access to training and advertising services. Meanwhile the client is assured of; high quality care, a consistent stock of important products, clean facilities and courteous service. Although the current pilots in Indian states are based around family planning services, the model could in theory be used to deliver any type of health service at the lower levels however, it is easier and cheaper to deliver commodities and products rather than services.

The challenges faced by the model include the financial sustainability of the franchisors and to a lesser extent the franchisees. Those that include a public health component often require ongoing subsidies to remain viable. However, given the positive externalities associated with such primary health care interventions as family planning and immunizations it might be sensible for government to partially subsidize the costs of the public good components of these services.

Training and Accreditation: A brief review of the operations of the APPs illustrates that the vast majority are unqualified to practice allopathy but nevertheless tend to spend most of their time doing just that. Moreover, in giving injections and/or prescribing medicines to almost all their patients they are potentially exposing themselves and their patients to HIV/AIDS and other diseases. At the very least government should intervene to offer advice, information and possibly accreditation to the APPs. This will ensure that at the very least that they have the required information to offer safe injections and hopefully will move some way to replacing irrational treatments with evidence based medicine. Some APPs currently pay for and attend training. If trained APPs could charge higher prices or attract more clients there would be an incentive for them to attend training. However, this would require (i) training to be accompanied with some recognized form of certification, (ii) government stewardship of the training course material and provision and (iii) public demand, which could be stimulated through education and awareness campaigns.

Public Education Campaigns: The review of health care provision in rural Karnataka illustrates that there is a huge need for government to invest in better knowledge for patients and their health care providers. If it proves too difficult to provide the appropriate incentives for APPs to be trained or if government does not believe that they can play a useful role in health care delivery, the public can still be educated. A health awareness campaign could cover the potential hazards of visiting APPs as well as general information on illnesses that the rural poor are likely to experience and their successful treatments. Such a program, if successful, would create a demand for improved needle protocols and reduced anti-biotics etc. Over time, improved training opportunities, social franchising and public education would be coupled with improved management and operation of the PHCs to gradually reduce the amount of quackery in the state.

The Political Economy of Change

At the moment both the public and private sectors are failing to improve health outcomes in Karnataka. The public sector is characterized by low levels of funding, poor incentives to perform and little or no effective oversight. Inadequate budgets result in unfilled posts and constant shortages of essential drugs. With no institutionalized incentives to perform, it is entirely upto the individual (especially the Medical Officers in charge of PHCs) whether or not they will offer decent health care services to the community.

Too often, doctors posted to rural areas will not be resident locally. Some will visit intermittently while others will not visit their official postings at all. By the time that complaints are lodged and investigated, the doctors will have been rotated to another district. This year for the first time, the Government of Karnataka has dismissed two doctors from the service – their offence, not reporting for work during the last ten years. It is claimed that such doctors often escape censure by bribing their superiors and that corruption within the system is endemic. Public doctors often charge patients for basic medical care that should be offered free of charge. Many



also operate private practices after hours. In all cases, their superior officers will receive a portion of the profits in return for turning a blind eye to the practice.

Corruption within the public sector clearly has a tremendously detrimental impact on health outcomes for the poor. This is an issue that needs to be tackled sensitively and straightforwardly by government. Despite high levels of public awareness and support for combating corruption, this will prove to be difficult issue to address as government officials are likely to feel extremely threatened and will be unwilling to enter into a dialogue on these issues.

Most public sector health officials also view the private sector with suspicion. Many are reluctant to encourage partnerships with the private sector whom they see as potential competitors. For instance, the government's initiative to let NGOs run selected PHCs has not been well publicized for this reason. For the most part, government officials also insist that all unqualified and unregistered APPs be closed down.

Key reformers within the state include senior government health officials who see the need for reform and are willing to experiment with pilot projects that can be replicated. Other key stakeholders that have an incentive to implement reforms include motivated doctors and the general public especially the end-users of rural PHCs.

The private sector is also a strong lobby group for increased private sector participation. Private health providers are experimenting with management contracts to operate private facilities. Medical colleges are interested in running PHCs to allow their trainee doctors to get first hand exposure to a variety of patients. There is also a strong tradition of charitable work that can be tapped successfully to augment limited public budgets devoted to health care.

However, some parts of the private sector e.g. drug companies that profit from corrupt procurement practices and undue influence over drugs stocked as the PHC as well as those prescribed by public doctors are likely to oppose any reform.

Those that have the greatest interest in improved health care provision are the poor. Unfortunately they are also those with least voice in the process. Improved health care outcomes will require increased community mobilization, education and awareness. Government must also consider methods of empowering them by adopting non-traditional techniques and community-based approaches usually piloted by NGOs. Successive waves of reform in the health sector have tended to shy away from these sensitive topics. However, any successful future reforms will have to consider and address the realities of the political economy of health.

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