PUNJAB
HEALTH SECTOR ASSESSMENT

A Policy Note

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This policy note is based on the findings of World Bank mission that visited Punjab in February 2004. The team consisted of Ismail Radwan, Paolo Belli, and Jet Riparip (consultant). The team also drew on the findings of an earlier report written by Dr. Sudershan K. Sudhakar in December 2003. The team was supported in Delhi by Nina Anand, Ritika Rodrigues and H. Bhawani. The authors would also like to acknowledge the assistance of Himani Pruthi and Yi-Kyoung Lee. The policy note was also intended to be an input into the Economic Report for Punjab and as such the team received valuable guidance from Mr. Vikram Chand, the task team leader for the Economic Report.

During a two-week period, the mission team visited public and private health facilities in various districts of Punjab including; Chandigarh, Patiala, Rupnagar and Fatehgarh Sahib. The team undertook announced and unannounced visits to several hospitals at the district and sub-division levels. Field visits also included a sub-centre, a primary health centre, and three community health centers.

During the mission, the team met with a broad range of health sector stakeholders including government officials, public and private health providers, members of the private sector, NGOs active in the field and various research institutes. This report would not have been possible were it not for their remarkable combined support.

The mission team would like to take this opportunity to thank the following government officials of the Department of Health and Family Welfare; Sri Darbara Singh Guru, (Secretary of Health), Dr. G. L. Goyal (Director), Dr. Sandhu (Director). The team enjoyed extensive discussions with senior management of the Punjab Health Systems Corporation including Lt. Col. Singh Kamboj (Chairman), Ms. Anjali Bhawra (Managing Director), Mr Vipin Sharma (General Manager), and Dr Rajinder Singh Saggu (Director) who also kindly accompanied the team on a weekend field visit. The team would also like to thank Dr. O.P. Singh Kande and Dr Jagbir Singh of the IMA.

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Punjab Health Sector Assessment

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Objective

1. The objectives of this policy note are as follows:

   - To analyze existing evidence on health outcomes, health financing, utilization of current health infrastructure in the public and private sector,
   - Identify the system's strengths and weaknesses,
   - Review recent innovations including the Punjab Health Systems Corporation (PHSC),
   - Provide policy recommendations that would improve the health outcomes in the State.

2. The note is intended to feed into the economic report for Punjab being prepared by the World Bank.

3. In the course of drafting this note, the team had extensive discussions with various health sector stakeholders in Punjab. The authors were provided with detailed documentation by members of the PHSC including the Patients' Satisfaction survey and the hospital performance study. Other reports were also consulted to gain a fuller understanding of the ongoing reform measures, and their achievements. Information gathered from the field visit is supported with an analysis of data from the National Family Health Surveys I and II, the Reproductive and Child Health Survey (RCH) and the National Sample Survey 52nd round (NSS).

4. The structure of the report is as follows;

   I Current Health Status

   II Health Care Financing

   III Health Delivery Systems

   IV Health System Performance

   V Review of the Punjab Health Systems Corporation

   VI The Way Forward

Executive Summary

Health Status

Despite having the highest level of per capita income and lowest rate of poverty of any state in India, and while spending more per capita on health than almost any other state, Punjab's health indicators are little better than national averages.

Communicable diseases, maternity and child welfare still constitute the major health challenges in the state. However, as a wealthy state, Punjab is well along in the epidemiological transition and non-communicable diseases are becoming relatively more important, particularly in urban areas. Punjab already has three times higher proportion of deaths due to heart attacks compared to national average, and they account for more than 30 percent of the total number of deaths in 1998.

Punjab made little progress on key health indicators during the 1990s the state was not able to significantly reduce infant and under-five mortality rates. In 1998-99 institutional births accounted for only 37 percent of the total, while 37.4 percent of all deliveries were not attended by any health personnel, and 25 percent of children were malnourished. Finally, the tragedy of female foeticide and infanticide continue to haunt the state, which has by far the lowest sex ratio in the country and there are strong indications that the situation is deteriorating rapidly.

Health Care Financing

In Punjab as in many other Indian states the majority of health care financing comes from households own out-of-pocket spending, which accounts for approximately 80 percent of total spending. The vast majority of these funds are spent in private facilities.

The state spends about 4 percent of its budget on health care. Despite allocating 55 percent of spending to the primary level, the system of PHCs and Subcenters is not functioning effectively. Part of the reason stems from the distribution of spending where more than 93 percent of state health spending (excluding external aid) falls on salaries. Such a high percentage of spending on salaries has squeezed spending on drugs, while the allocations to maintenance, minor works and vehicles have been completely eliminated from recent budgets.

Budget allocation criteria are based on inputs and historical expenditure. At the district level budget allocations are fragmented, and non transparent. It is virtually impossible to track the flow of funds within the system to understand how much different providers, and services are actually financed, and what results they are achieving in terms of health outputs and outcomes. A significant part of spending on salaries is actually wasted, because health staff are unavailable, or not performing their duties satisfactorily. The system does not have any mechanism to reward good performance, or to hold staff accountable.

Health Infrastructure

The state's public sector facilities are adequate at all levels and compare favorably with other Indian states. However, at the disaggregated level, health facilities and health sector professionals are highly concentrated in a few urban areas leaving the more remote districts

in the south of the state and close to the border with Pakistan relatively poorly served. Key specialists and support staff are missing in public facilities. In the more peripheral and rural areas, absenteeism and vacancy rates are extremely high in the public sector, and in the private sector, non-fully qualified or informal providers still prevail.

Private sector facilities have grown rapidly and in a policy vacuum. They are also heavily concentrated in urban and wealthy areas. Most private facilities are individually-owned and operated. It is also estimated that Punjab is home to 116,000 informal providers that are often the first port of call for many poor villagers.

Health Seeking Behavior

The majority of people in Punjab seek care from the private for profit sector, both for inpatient (65 percent) and in even greater proportion (86 percent) for outpatient care. The private sector is also extensively utilized by those below the poverty line, or/and Scheduled Casts population. The public sector prevails for immunizations, antenatal care, and for health prevention and promotion activities.

With such a significant proportion of services provided and purchased privately, in order to improve health outcomes, the Government needs to improve its stewardship over the whole health care sector, including the private sector. There are a number of opportunities for improved health care by adopting private sector management techniques and pioneering public private partnerships in the state.

Health System Performance

In terms of health system performance, Punjab compares well with the Indian average, but lags behind other states at comparable levels of socio-economic development. Key indicators point to a mixed picture with high contraceptive prevalence at 67 percent but a very low proportion of institutional deliveries, which at 38 percent is less than half that of Tamil Nadu or Kerala.

Progress during the nineties has been uneven. Some key indicators, such as IMR, in fact show a marked deterioration over time, while indicators of health services' coverage and of nutritional status have improved significantly.

Punjab shows the same acute inequalities as the rest of the country, in terms of distribution of service utilization by socio-economic groups. The health sector largely fails to reach the poor, mostly concentrated among rural populations and schedule castes. However, geographic inequalities do not seem to be as severe as in several other Indian states. The relatively good quality of roads, the absence of vast forest or mountainous areas, the relatively restricted geographical area covered by the state all seem to make Punjab a relatively uniform state.

As in other Indian states, public health care expenditure disproportionately benefits the better off segments of society. Overall public health expenditure seems to be markedly regressive for inpatient treatment and deliveries.

Information on quality of care is not precise and systematic, but all the evidence we have does show that this is currently the most important issue in the sector, and that demand is very responsive to quality. In the government sector, three key issues stand out as obstacles; (i) unsuitable timings of both urban and rural public facilities, (ii) lack of attention from unwelcoming staff and (iii) lack of medicines especially in the rural areas.In general the performance of the formal private sector tends to be better than that of the public sector, although stark differences exist among different types of private sector providers.

Patients have not been discouraged from attending government secondary and tertiary care facilities by the introduction of a systematic and transparent set of user charges in 1996. The introduction of user-charges has witnessed large increases in the number of patients; the revenue generated from user charges, retained at the hospital level, has been used to provide drugs, improve patient facilities, equipment and building maintenance, thus significantly enhancing quality of care. In a relatively wealthy state such as Punjab, patients showed that they prefer to pay a fee for service, rather than accept the corollary no-fee / no-service which was the situation prior to the reforms that introduced user-fees.

Punjab Health Systems Corporation

With World Bank support, in 1996, the government of Punjab embarked on an ambitious program to improve the state's secondary health services. The project has been successful in providing improved secondary infrastructure facilities along with the introduction of important reforms. These included: (i) establishment of the Punjab Health Systems Corporation; (ii) introduction of user fees and greater hospital autonomy and (iii) improved management and training.

Some issues still remain unaddressed. Secondary care facilities are well utilized during OPD consultation hours, usually between 9.00am and 3.00pm, but they are largely deserted during extra-hour, mainly because of lack of staff. In the late afternoon, the patients disperse as all but one doctor leaves the building and a skeleton staff is left to run the facility. Moreover, public secondary hospitals have not been able to take on the role of first referral units for emergency obstetric care cases. Only 2-3 percent of the total number of deliveries takes place in PHSC hospitals, which is a poor result.

There is also a lack of coordination between the primary, secondary and tertiary level, and the referral system is practically non-existent. The tertiary care facilities and the district and sub-district hospitals bear the burden of the existing poor referral system, the lack of coordination with, and the dysfunctional nature of lower level facilities.

In conclusion, while coverage may still be an issue particularly in the peripheral rural areas, all the evidence shows that the key issue to address in Punjab is poor quality of services. In the public sector, the deterioration of services is extremely severe, particularly in primary care. It is due to a number of factors, some of which affect to a less extent also the secondary and tertiary sector, and all of which can be summarized as insufficient spending, poor allocation of public spending, and lack of sound management, which leads to a high level of general apathy to a non-functioning system.

Policy Recommendations

Policy recommendations are presented in the final section and include:

- Improving Stewardship and Management;
- Strengthening Health Care Financing;
- Engaging the Private Sector
- Strengthening public health;
- Reforming primary health care, taking advantage of contracting out to private sector providers, and of the ongoing decentralization process to improve accountability;
- Consolidating improvements in secondary health care, by confirming and strengthening the role of the Punjab Health Systems Corporation.

I Current Health Status

Introduction

1. **Although Punjab's health indicators are better than India-wide averages, the state lags behind other states at similar or lower income levels.** Comparative data indicates that Punjab's health performance is better than the average for all India. However, by comparing key health indicators of Punjab and the best performing Indian states (Table 1.1), one can see that Punjab lags behind, in spite of having the highest level of per capita income and by far the lowest level of poverty in the country.

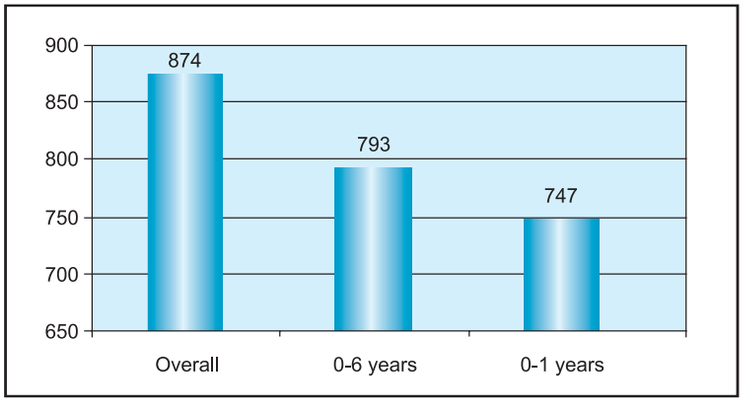
Table 1.1 : Key Development and Health Outcome Indicators (1996-1998)

	Per capita income Rs (current prices 2001/02)	Poverty Headcount Ratio- (1999/00)	Infant Mortality Rate- (per 1,000)	U5 Mortality Rate (per 1,000)	Maternal mortality rate (per 100,000)	Percentage of children U3 stunted-
All India Average	20,198	26.1	67.6	94.9	453	45.5
Punjab	**29,973**	**6.2**	**57.1**	**72.1**	**369**	**39.2**
Marahastra	29,873	25.0	43.8	58.1	336	39.9
Kerala	26,603	12.7	16.3	18.8	87	21.9
Tamil Nadu	23,414	21.1	48.2	63.3	376	29.4
Karnataka	22.816	20.0	51.5	69.8	450	36.6
West Bengal	20,039	27.0	48.7	67.6	389	41.5
Andhra Pradesh	20,112	15.8	65.8	85.5	436	38.6

Source: State GNP and poverty count: World Bank 2004; IMR, U5M, % children stunted: NFHS-2, 1998/99; MMR, UNICEF, 1995.

2. **The sex ratio in Punjab is worse than in any other state in India**, and has deteriorated even further in recent years (see Box 1.1 below). This issue is getting worse as the state gets wealthier and parents desire smaller family sizes. The State Government has implemented several measures to curb female feticide, including awareness generation campaigns, compulsory registration of ultrasound/ genetic centres, and a series of legal actions taken against unregistered centres. The impact of these measures is still uncertain[1].

Figure 1.1 : More and more missing girls (age specific Sex Ratio in Punjab)



Source: Agarwal, Female Foeticide, Myth and Reality, 2003

[1] As regard to evidence of impact is concerned, it is pointed out that Directorate of Health Services has carried out a study covering the period from Nov-03 to Jan-04 and involving age group 0-6 years. The study shows that now the sex ratio is 894, a level much higher than the 793 previously recorded. This study was undertaken by Dr. B.K. Goyal, (Director).

Box 1.1 : Female Foeticide

- The birth of a girl, grant elsewhere; here grant a boy. Atharva Veda

Female foeticide is a significant and increasing problem throughout India. At the beginning of the century, the female to male sex ratio was 972 per thousand. This figure had dropped to 927 by the time of the 1991 census. Punjab has the worst sex ratio in the country with 874 females for every 1000 males. Moreover a modern desire for smaller families, along with a misuse of modern science to identify the sex of the foetus and abort females is leading to a declining trend of sex ratios. Every year 100,000 female fetuses are killed in Punjab. The IMA estimates that, throughout the country, more than 5 million women are driven to seek illegal and often dangerous abortions to avert the birth of an unwanted girl.

Still more disturbing is the fact in Punjab that female child mortality is much higher than male child mortality. The National Family Health Survey carried out in 1998-99(NFHS-2) found that the post-neonatal mortality rate is twice as high for girls as for boys, and the child mortality rate is four times as high for girls as for boys (see Figure 1.3). In Punjab, the nutrition and health care of female children are being grossly neglected.

Traditional Indian society sees the female child as someone brought up by the family only to be given away to the husband's family, often with a handsome dowry upon marriage. The male child will carry the family name, remain with the parents to look after them in old age and perform burial rituals that are traditionally barred to females. The status of women who give birth to sons is elevated and pregnant women who are carrying boys are better looked after during pregnancy. In Punjab, these values are accentuated in a predominantly agrarian and martial culture.

Although it is often thought that such practices abound among the less affluent, less educated strata of society, recent evidence illustrates that this is not the case. Wealthier women want smaller families, they also can afford to pay for the ultrasound and safe abortion and are quick to seek to terminate a female foetus if they already have one girl. Poorer families often wait until they have two girls before resorting to such methods. The study also revealed that 75 percent of female foeticide in Punjab was undertaken without the consent of the mother. In such cases the husband and in-laws forced the mother into this course of action. This happens more frequently in upper caste families.

As 85 percent of women undergoing female foeticide consider it a sin, religious advocacy will not solve the problem. Interestingly less than 3 percent of those surveyed in Punjab said that girls are a financial burden and most families stated that the ideal family is one girl and one boy. Poorer families however, wanted two sons and one girl to be doubly sure of the male child. So the detrimental sex ratio is due to preference for the male child with a desire for a small family rather than a desire for no girls. Empowering women and increasing their status in the family and decision-making ability will be a key to eradicating these practices.

Sources: Female Infanticide in India, Manushri Bahukhandi. Anurag Agarwal Female Foeticide, Myth and Reality 2003. Dr. O. P. S. Kande. Female Foeticide – A crime, let us fight it out. 1999.

Burden of Disease

3. **Children and the rural poor continue to suffer from high levels of morbidity and mortality due to communicable disease; by contrast, the urban and wealthier population is increasingly affected by non communicable and chronic diseases**.

4. **Communicable diseases are still a major issue.** Using population and census data from 1991, and Sample Registration Scheme (SRS) data from 1990, 1991, and 1992, a burden of disease analysis[2] estimated that Punjab lost 5 million DALYs (or 242/1000 population) in 1992. This placed Punjab behind Maharashtra but ahead of states such as Karnataka and Andhra Pradesh. The study also indicated that at the beginning of the '90s, the major cause of lost DALYs in Punjab was still communicable diseases.

5. Table 1.2 below indicates the relative burden of disease caused by type of disease. Group I diseases include pre-transition disorders such as communicable diseases, maternal, peri-natal and nutritional deficiency. Group II and III include non-communicable diseases and injuries and accidents respectively.[3]

Table 1.2 : DALYs (Disease adjusted life years) lost per 1,000 population[4] by major cause groups in rural and urban areas, 1991-92

	DALYs lost per 1,000 Rural			DALYs lost per 1,000 Urban		
State	Group I	Group II	Group III	Group I	Group II	Group III
Punjab	134.41	73.51	43.86	114.39	56.15	32.08
Maharashtra	148.29	72.25	41.54	100.74	47.87	18.31
Karnataka	165.56	72.78	43.24	109.90	50.27	22.13
West Bengal	164.6	69.14	44.03	96.66	53.84	20.29
Andhra Pradesh	160.04	81.46	47.23	97.67	74.25	30.45

Source: ASCI 2001.

6. The table indicates that at the beginning of the '90s **in urban populations the epidemiological transition was already under way, and the burden of disease was shifting towards non-communicable diseases** (NCDs). By contrast in rural areas, people still suffered mostly from communicable diseases. Note that urban populations also enjoyed better health outcomes for all types of diseases. The potentially detrimental effects of a sedentary lifestyle and unhealthy diet are clearly outweighed by improved access to health care and improved education levels in urban centers.

7. **The greatest disease incidence was in the 0-4 year category**. At the beginning of the '90s, the incidence of DALYs lost per population was highest among children, reflecting a high number of infants succumbing to communicable diseases (see Figure 1.2).

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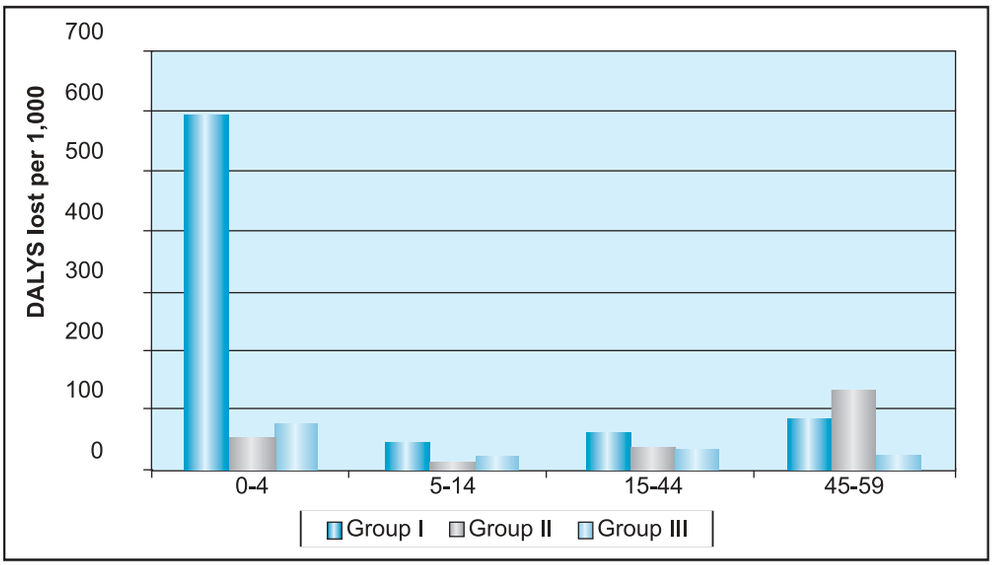
[2] Comparative Assessment of the Burden of Disease Across Selected States in India, Administrative Staff College of India (ASCI) Research Paper Series, September 2001.

[3] Ibid.

[4] The measure, Disability Adjusted Life Years (which at first approximation can be described as the sum of the years lost due to premature mortality, and of the "years" lost due to disability) lost per 1,000 population allows reasonable comparisons of profiles of disease burden or incidence between different states and countries.

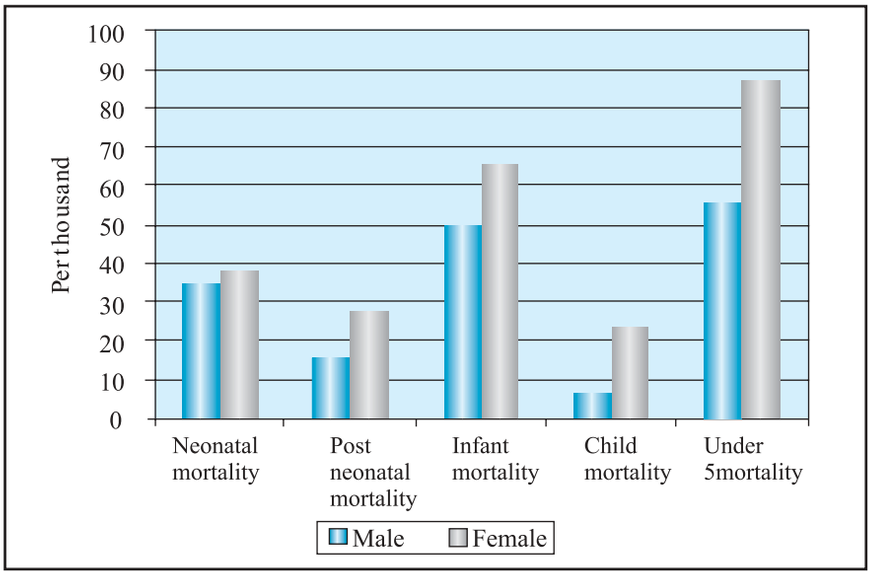
Figure 1.2 : Punjab, Distribution of DALYs lost per 1,000 population by age groups



Source: ASCI 2001.

8. **There were huge gender discrepancies behind the aggregate figures.** Mortality data for Punjab indicated that female children were much more susceptible to communicable diseases than their male counterparts. As explained above, the girl child in Punjab faces a number of challenges prior to birth. Following the birth, girls are not well feed, often not fully immunized and often liable to be abandoned. Evidence from NFHS, 1998 show that female child mortality is four times higher than male child mortality (see Figure 1.3 below). Filmer et al (1998) found that female to male ratio of no treatment for Acute Respiratory Infection is 1.67 in Punjab, the second highest in India.

Figure 1.3 : Punjab Mortality Indicators by Sex 1988-1998[1]

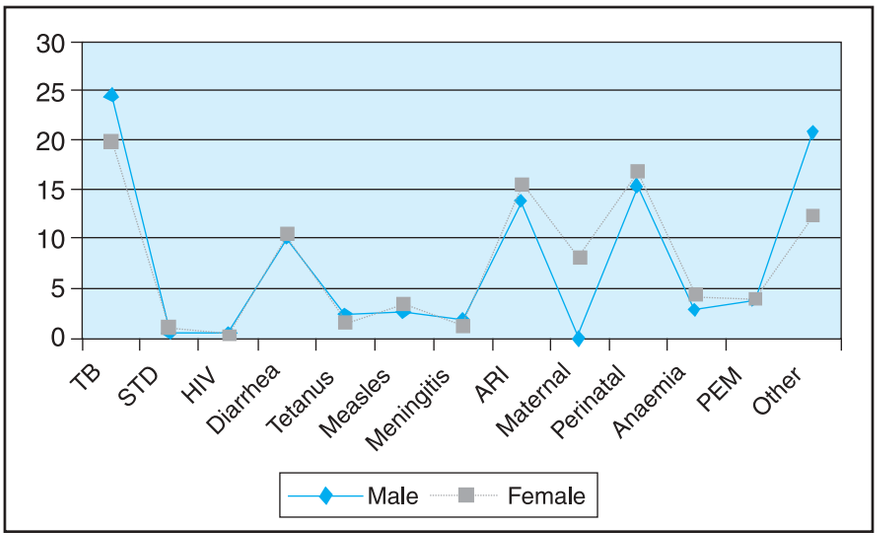


Source : NFHS 2 (1998) report

1 Neonatal = 1 month, Post neonatal = 1 –12 months, Infant = 0- 1 year, Child = 1-5 years and Under 5 = 0-5 years.

9. **TB accounted for more DALYs lost than any other group I disease.** Disaggregating the data on Group I diseases in Punjab indicates that the major diseases affecting the state were TB, Diarrhea, ARI, perinatal conditions and other diseases (including malaria, leprosy). Together these diseases accounted for approximately 85% of all DALYs lost to group I diseases (see Figure 1.4). Maternal and perinatal causes accounted for 25% of DALYs lost in females. These figures are a cause for concern in a state which otherwise has high rates of literacy, good socio-economic conditions and food security.[5]

Figure 1.4 : Percentage of DALYs lost due to top 12 diseases in Group I in Punjab



Source: A comparative Assessment of the Burden of Disease in Selected States: Methodology, results, policy and program interventions, ASCI Research Paper Series, No. 2. June 2002.

10. **During the 90s the epidemiological transition continued, and by the end of the '90s** in Punjab deaths due to NCDs, injuries and accidents contributed to a much higher proportion of deaths compared to national average, as the following Table 1.3 shows.

Table 1.3: Leading causes of death. Punjab 1998 (share over the total)-

Cause	Punjab	India
Bronchitis Asthma	5.8	14.8
Heart attack	31.7	10.5
TB of lungs	2.5	5.8
Paralysis/Cerebral Apoplexy	4.7	5.4
Cancers	5.4	5.0
Anemia	0.7	3.9
Pneumonia	2.2	3.8
Suicide	4.0	3.2
Vehicular accidents	6.1	2.6
Total accounted	63.1	55.0

Source: Sample Registration Scheme, 1998

[5] A comparative Assessment of the Burden of Disease in Selected States: Methodology, results, policy and program interventions, ASCI Research Paper Series, No. 2. June 2002.

The message is loud and clear. Punjab has three times higher proportion of deaths due to heart attacks compared to national average, and in general deaths due to non communicable diseases are relatively much more significant than those due to communicable diseases compared to the national average.

11. **Injuries and accidents continue to play an important role.** The 1992 Burden of Disease study indicated that accidents and injuries (including suicides) contributed to more than 15 percent in terms of DALYs lost in both rural and urban areas. The same pattern is confirmed by looking at SRS, 1998 data, according to which injuries and accidents account for more than 10 percent of the total number of deaths. Behavior change through education especially for road safety could play a major role in reducing the number of deaths and disabilities. More than 2,800 road traffic deaths were recorded in 2000, a number that has increased by 500 percent in the last 20 years. This is more than four times the number of murders in the state and even surpasses the number of militant killings in the late 1980s and early 1990s.[6] Again it is worrying that girls are almost twice as likely to fall prey to injuries and accidents as boys.

[6] The Chandigarh Tribune online edition, August 21, 2000.

II Health Care Financing

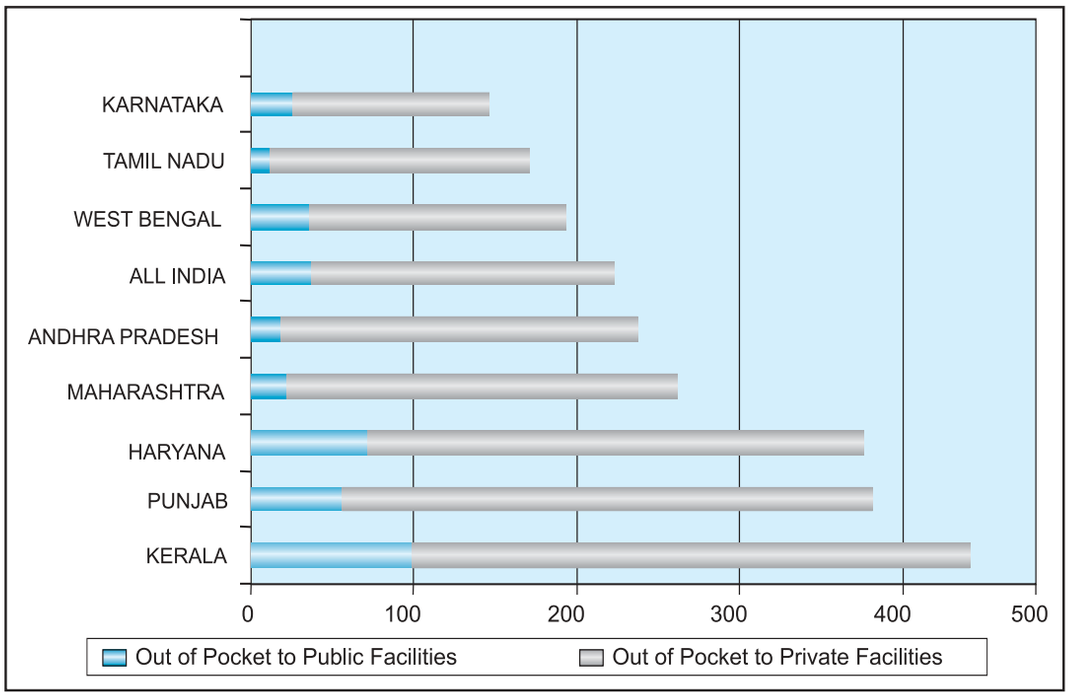
Total Health Care Spending

12. It is difficult to put an accurate figure on total health expenditure in Punjab as spending on private sector health care is not well documented. However, on the basis of NSS data, we estimate that total per capita health expenditure in Punjab for the year 1995/96 was about Rs. 548 or approximately 3.35 percent of GSDP[7].

Where does the money come from?

13. The two main sources of health financing are households' out-of-pocket expenditure and government expenditure. The nascent health insurance sector in Punjab as in other Indian states accounts for a trivial portion of the total market. According to the NSS estimates (1995-96), households total health spending was equal to Rs 381 per capita in 1995-96. This was the second largest amount recorded across Indian states, after Kerala (see Figure 2.1 below)

Figure 2.1: Total Out-Of-Pocket Expenditure in Public and Private Facilities in Various Indian States, 1995-96-Rs/Person/Year



Source: IHSG, 2003, based on NSS 1995-96

[7] The estimate of total health expenditure is arrived at by adding a number of elements to total household health expenditure and documented government spending:

(i) Foreign assistance which accounts for 1 percent of total health expenditure; (ii). The amount spent by private firms on their own facilities or health insurance which accounts for 1.5 percent of total health expenditure, and (iii) NGO financing which amounts to 0.39 percent of total health expenditure.

Projecting the above estimate of Rs. 548 per capita to fiscal year 2003-04, under the assumption of an increase in private health expenditure in line with GSDP nominal growth (income elasticity of demand for health services >=1) would give an estimate of THE equal to US$ 40-45 per capita.

14. The second source of financing is government. According to National Health Accounts estimates, based on 1995/6 information, total public expenditure was Rs 3,408 million or Rs. 148 per capita.[8] Table 2.1 presents data on the various financing sources of public health expenditure excluding foreign assistance.

Table 2.1 Sources of Public Expenditure (Rs m 1995/6)

Level of Government	Amount	Share
Central	926	27.2%
State	2,190	64.3%
Local	3	0.1%
Public Enterprises	290	8.5%
Total	3,408	100.0%

Source: Mahal, 2004

Where does the money go?

15. The vast majority of out-of-pocket expenditure is spent on private facilities (See Table 2.2). Note that private providers share accounts for 85 percent of total medical expenditure.

Table 2.2 Punjab : Total Out-of-Pocket Expenditure (Rs/person/yr 1995/6)

	Outpatient	Inpatient	Total	Share
Public	25.82	30.40	56.22	15
Private	268.56	56.46	325.02	85
Total	294.38	86.86	381.25	100

Source: Mahal, 2001; based on NSS 1995-96

16. Expenditure of central government includes financing of Centrally Sponsored Schemes (some of which are co-financed with the state, such as the TB program, and some other are exclusively financed by the central government, such as Reproductive and Child Health), as well as financing of health expenditure of other ministries, such as medical expenses of Union government military stationed in Punjab. Local government health expenditure includes own-sources expenditure, ie, expenditure financed by the Municipalities, and the Panchayats, as well as expenditure financed by the State government.Garg (2001) estimates that the Panchayats finance with their own sources 35 percent, and depend on grants from the state for 65 percent of their health expenditure. Public firms contribute to ESI health insurance premiums for their employees, or in certain cases (such as Railways company) utilize their own facilities. For the state component of health expenditure, we also dispose of more recent and precise information on its evolution over time, and its breakdown by level of care and by input.

[8] Ajay Mahal, 2004,

Table 2.3 Punjab State Expenditure on Health, various years (Rs. million)

	1996/7 Actual	1997/8 Actual	1998/9 Actual	1999/0 Actual	2000/1 Actual	2001/2 Actual	2002/3 Revised Estimate	2003/4 Budget Estimate
Primary	1793.1	2075.5	2888.8	2718.8	3088.2	3456.2	4210.4	4393.1
Secondary	755.3	872.4	1242.2	1389.4	1749.7	1554.4	1528.7	1355.4
Tertiary	473.1	622.5	804.5	977.4	1002.4	858.0	1222.1	972.6
ESI	-	217.9	253.0	270.5	351.8	313.1	417.4	396.1
Health Sector Expenditure.	3021.5	3788.3	5188.5	5356.1	6192.1	6181.7	7378.6	7117.2
HSE % of total	3.46%	3.19%	3.34%	2.97%	3.98%	4.51%	4.46%	3.81%
% yearly HSE change		25.38	36.96	3.23	15.61%	-0.17%	19.36	-3.54

Source: Punjab budget document, various years

17. **Health sector spending accounts for approximately 4 percent of the state government budget**, which is low by international standards, although similar to several other Indian states. As the table above illustrates, state government health sector expenditure in the last few years has been characterized by sudden increases, followed by phases of consolidation.

18. **Public spending on primary care accounts for a significant share of total spending.** If we consider the break-down by levels of care, primary care accounts for approximately 55 percent of the total, which is in line with the target for primary care set in the National Health Policy 2002. However, its share appears to be slightly declining over time, while secondary care is stable at 25 percent, and tertiary care is increasing and currently accounts for 20 percent of the total.

19. **Salary expenditures account for 94 percent of the state health budget.** A breakdown of government expenditure by inputs for fiscal year 2000-01, the last fiscal year for which actual figures are available, shows interesting results. Excluding Grant in Aide, which mainly consists of capital expenditure in secondary care facilities funded through the World Bank supported Health Systems Development Project, we find that salary expenditure accounts for almost 94 percent of total expenditure. This has squeezed the budget for drugs which, at approximately Rs. 90 million, is extremely low and results in chronic and repeated shortages. Moreover, given overall budget limitations, actual spending on drugs was just Rs. 81 million in fiscal year 2003-04.

20. **There is no state budget for maintenance.** There is no allocation for maintenance or for minor works. Informal discussions during our visits confirmed that the situation has not changed since 2000-01. Following repeated suggestions by World Bank officials, government budgeted an amount of Rs. 45 million (Rs. 30 million for maintenance and Rs. 15 million for cleaning) during the last fiscal year 2003-04. However, the amount was not released.

Table 2.4: State Health Expenditure By Inputs (Rs. thousand)

Inputs	2001-02 Actual	%of Total	%Excluding Grant in Aid
Salary and wages	4,839,737	78.29	93.78
Medical reimbursement	8,796	0.14	0.17
Supplies and material and drugs	91,631	1.48	1.78
Machinery and equipment	17,497	0.28	0.34
Minor works	0	0.00	0.00
Grant in Aid	1,021,221	16.52	
Other	202,838	2.28	3.92
Total	6,181,720	100.00	100.00

Source: Own computations on the basis of Punjab budget document, various years

Additional sources of public spending

21. The sources of public funding also include user fees and multilateral funds.

- **User fees** are rapidly growing as a source of public funding. Beginning from a small collection of Rs.4.1 million in 1996-97, the PHSC hospitals collected Rs. 100 million in 2002-03 and, based on the collections in the first six months, it is estimated that the collections during 2003-04 will be over Rs. 135 million.
- **Multilateral funds** account for a significant proportion of health expenditure. They have been mainly utilized to finance capital expenditure in the secondary care public sector. The World Bank supported Punjab Health System Development Project resulted in expenditure of over Rs. 4 billion between 1995/6-2003/4.
- **Employees State Insurance Scheme (ESI):** The ESI provides health insurance to 383,000 formal sector workers in Punjab. The scheme is mandatory for employees earning upto Rs. 6,500. (More information on the ESI scheme is included in Annex 1).

III Delivery system and health seeking behavior

Public Sector Delivery system

22. **The public sector has an adequate number of health facilities at all levels.** The Government of Punjab runs 208 public hospitals[9], 117 Community Health Centres, 484 Primary Health Centres (PHC), 1470 Subsidiary Health Centres (SHC), and 2852 Sub-Centres (SC). District and subdistrict hospitals are based in urban areas with more PHCs and SHCs based in rural areas. This results in the majority of beds available in urban areas. Given the ease of access and availability of transport in Punjab, even urban hospitals are easily accessible by rural populations.

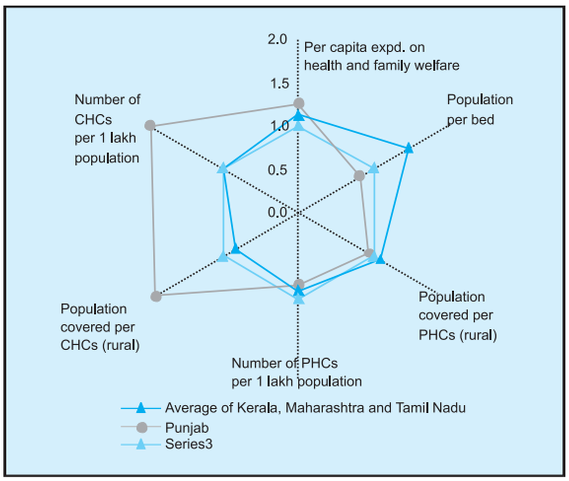
Table 3.1 : Public Health Care Facilities in Punjab, 2001.

Category	No. of Institutions			No. of Beds		
	Rural	Urban	Total	Rural	Urban	Total
Hospital	73	135	208	2,250	12,069	14,319
Hospital/CHC	2	10	12	80	522	602
CHCs	35	20	55	1,066	634	1700
PHC/CHC[10]	24	14	38	720	420	1140
PHCs	422	24	446	1688	98	1786
SHC/Disp./Clinics[11]	1,220	250	1,470	4,849	654	5503[12]
Total	1,776	453	2,229	10,653	14,397	25,050

Source: Statistical Abstract of Punjab

23. **Punjab's public sector health infrastructure compares favorably with other Indian states.** As Figure 3.1 shows, the public infrastructure seem to be adequate in comparison to other Indian states. Moreover, the public sector alone is able to meet WHO norms of providing 1 bed per 1,000 population. With a further 16,000 beds available in the private sector the state comfortably meets reasonable expectations for infrastructure provision at the aggregate level. We have no information on the quality of the infrastructure available in the primary sector.

Figure 3.1 : Indicators of Health Infrastructure (1990s)



Source : National Human Development Report, 2002.

[9] At the tertiary level, the state has three public medical colleges, and three private medical colleges.

[10] There is some confusion in the classification because some institutions are classified as rural hospitals, as well as CHCs and PHCs. In physical terms it is only one institution, but it is counted as if the number of institutions were three.

[11] It has not been possible to have more disaggregated information, which would distinguish among Sub Health Centres, Dispensaries and Clinics.

[12] In Sub Centres where immunization takes place 1-2 beds are the norm for observatory requirement.

24. However, **shortages of human resources in key specialties and in rural areas** is one of the leading causes of poor delivery of health services at primary as well as secondary level public facilities. **This is due to high vacancy rates, and absenteeism rates.** Recent evidence from a survey of government Primary Health Centres shows that doctors and other staff's absenteeism are extremely high in Punjab: on average, on any one day, 39 percent of PHCs doctors and 44 percent of other medical personnel are absent[13] from their place of work.[14]

25. **In the last few years, there has been a ban on new recruitment**. This has been imposed with a view to reduce non-plan expenditure. However, the generalized upgrading and expansion of secondary level facilities under the World Bank supported project has in fact generated additional need for manpower, particularly specialists, which is still largely unmet.[15]

26. **Overall, health sector professionals are highly concentrated in certain areas.** There are close to 16,000 registered doctors (or 1 per 1,472 people) supported by a further 21,000 midwives and 12,000 nurses. However, these medical professionals are heavily concentrated in certain areas such as Amritsar, Patiala, Ludhiana and Jalandhar. Other districts such as Muktsar, Moga, Mansa and Nawan Shahar are extremely poorly served. In the public sector, the current posting criteria for existing human resources are leading to biased and irrational results. Internal redeployments within districts are exacerbating the problem of non availability of doctors. At the same time, inpatient services are suffering due to non availability of paramedics. Every physician thinks twice before admitting a patient at CHC level.

Private sector delivery system

Formal Private Sector Facilities

27. **Formal sector private facilities are heavily concentrated in urban areas** despite being home to only a third of the total population. Two-thirds of the state's 206 urban private sector hospitals are found in just 2 (Ludhiana and Jalandhar) of the 17 districts of Punjab. Rural areas and districts close to the border with Pakistan have much fewer private facilities at all levels.

28. As one would expect, rural areas are marked by a higher proportion of lower level facilities than urban areas. Table 3.3 indicates the breakdown of health facilities by type. Most of the facilities are stand alone units often owned by an individual or single family. Only 5% of such facilities form part of a chain of two or more facilities under the same management.

29. According to a recent survey of private practitioners, these private facilities account for almost 8,000 doctors. 86 percent of these doctors are full time staff with the remainder made up of part-time and visiting staff. The largest number of private sector doctors is general practitioners operating in clinics. The specialists are concentrated in a few areas including; medicine, eye, obstetrics and gynecology and dentistry. The large numbers of obstetricians and gynecologists in the private sector is

[13] Of the 39 percent absent doctors, 11 percent were absent without reason, 12 percent were on authorized leave and the remaining 16 percent were away on official duty.

[14] Provider Absence Project Research Team, World Bank, 2004.

[15] This are the additional requirements assessed by the Corporation: i) Doctors: 525; ii) Paramedical Staff: 1013; and iii) Support Class-IV: 642.

Table 3.2 : Distribution by type of health facility

Type of private facility	Urban	Rural
Hospital	206	35
Nursing Home	597	61
Poly Clinic	76	10
Clinic	2,554	384
Dispensary	37	16
Other	37	18
Total	3,507	524
Total private beds	15,004	1,018

Source: Survey of private practitioners in Punjab, Foundation for research and development of underprivileged groups

mirrored by shortages in the public sector which deter many women from seeking institutional deliveries in the public sector.

30. Although the majority of private facilities offer allopathic services other systems of medicine are mixed with allopathy in 28 percent of private facilities and this figure rises to 49 percent of facilities in rural areas where ayurvedic, unani and homeopathy are popular.

Informal Providers

31. It is estimated that there are about 116,000 informal providers in Punjab. Approximately 28,368 of whom are non-fully qualified medical practitioners and a further 88,000 are quacks. The former group includes registered medical practitioners (an estimated 7,000) and those qualified in other forms of medicine that are practicing allopathy as well as unregistered medical professionals such as compounders and pharmaceutical representatives. The latter group includes faith healers, shamans and charlatans. However, whether qualified, registered or not, the supreme court has ruled that all practitioners practicing a system of medicine for which they are not fully qualified are quacks and are practicing illegally. Moreover, in practice, there no difference between those that are registered and those that are not and all can be considered as informal providers.

Table 3.3 : Informal providers by type

Provider	Number
Registered	7,684
Unregistered	14,676
Uncertain registration	6,008
Quacks	88,000

Source: Survey of private practitioners in Punjab, Foundation for research and development of underprivileged groups.

32. In rural locations where there are about 2 such informal providers per village they are often the only easily accessible source of medical care. A Punjab study illustrates that 90 percent of informal providers are located in the rural areas. The remaining 10 percent are located in urban and peri-urban areas. In rural areas 87 percent of informal providers were educated to matric (high school). This rate was as high as 94 percent in urban areas.

33. Informal providers operate for profit and generally offer curative services of minor ailments such as headaches, pains and fever as well as referral to the nearest private facilities. Only 1 percent had in-patient beds and most of these are found in the urban areas where they are often used mostly for observation rather than proper in-patient treatment. It is estimated that informal providers alone attend to 300,000 or more patients per day (between 13 and 14 patients each).

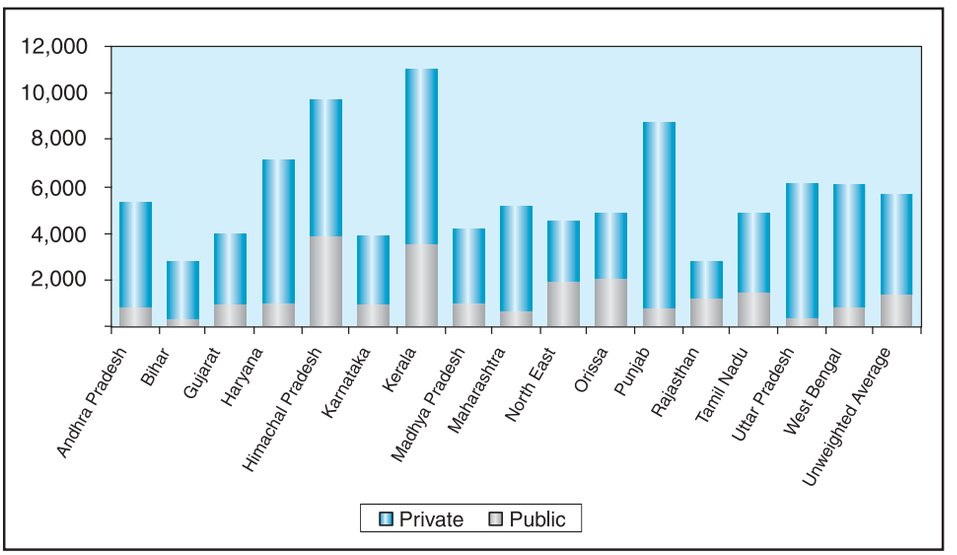
34. In some districts, Ferozepur, Gurdaspur and Amritsar, informal providers are involved in family welfare activities such as immunization and deliveries in both urban and rural areas. Informal providers involved in such activities range between 5-10% of the total.

Health seeking behavior

35. **The majority of people in Punjab seek care from the private for profit sector**. According to NSS data (1995-96), about 86 percent of OPD patients are catered for in the private sector. A further 9 percent attend public as well as private health care facilities (see Figure 3.2).

36. A similar pattern emerges with respect to in-patient care where the private sector also dominates the public sector. Even for those below the poverty line, 56 percent are treated as in-patients in the private sector (see Figure A2.1). Almost a quarter of towns and half the villages in Punjab only have private health facilities forcing those that seek public sector medical treatment to travel further afield.

Figure 3.2 : Utilisation of Outpatient Services by State per 1000 popn



Source: National Sample Survey 1995-96, 52nd Round

37. **The poor in Punjab are overwhelmingly likely to use the private sector for health care.** According to NFHS-2 data, even among the poorest group, only 16-17 percent utilize public facilities, whereas 82-83 percent rely on private for-profit providers (see Table 3.4).

Table 3.4 : Source Of Health Care – Rural and Urban

	Quintile		Caste		Location		
Source	Lowest	Highest	SC/ ST	Non SC/ST	Urban	Rural	Total
Public medical sector	16.9	10.7	16.1	11.8	13.0	14.2	13.8
Govt./municipalHospital	8.9	8.4	9.5	7.9	10.2	7.9	8.6
NGO or trust	0.2	0.2	0.2	0.1	0.3	0.1	0.2
Pvt. medical sector	82.7	88.8	83.5	87.9	86.6	85.5	85.9
Pvt. hospital/clinic	34.5	41.9	34.4	41.4	38.5	38.0	38.2
Other source	0.2	0.3	0.2	0.2	0.1	0.2	0.2
Number of HHs	650	587	1383	1584	930	2037	2967

Source: NFHS-2, 1998/99

IV Health System Performance

Overview of Health System Performance

38. Health system utilization indicators in Punjab compare well with the Indian average, but Punjab lags behind other states at comparable levels of socio-economic development. Key indicators point to a mixed picture with high contraceptive prevalence at 67 percent but a very low proportion of institutional deliveries which at 38 percent is less than half that of Tamil Nadu or Kerala.

Table 4.1: Comparative Health Service Coverage and Access Indicators

	% Children Receiving All vaccinations (1-3y)	% of Pregnant Women Receiving at least 1 Ante-Natal Check Up	% of Pregnant Women Receiving at least 2 Tetanus Toxoid Injections	% Pregnant Women Receiving Folic Acid	% Instit. Deliveries	% of Births Attended by Health Profess-ional	% Married Women Using any Contra-ceptive Method
All India	42.0	65.4	66.8	57.6	33.6	42.3	48.2
Punjab	72.1	74.0	89.9	79.6	37.5	62.6	66.7
Kerala	79.7	98.8	86.4	95.2	93.0	94.0	63.7
Tamil Nadu	88.8	98.5	95.4	93.2	79.3	83.8	52.1
Maharashtra	78.4	90.4	74.9	84.8	52.6	59.4	60.9
Karnataka	60.0	86.3	74.9	78.0	51.1	59.1	58.3
West Bengal	43.8	90.0	82.4	71.6	40.1	44.2	66.6
Andhra Pradesh	58.7	92.7	81.5	81.2	49.8	65.2	59.6

Source: NFHS-2, 1998/99

39. **Progress during the nineties has been uneven.** Some key indicators, such as IMR, show a deterioration over time, while others have improved.

Table 4.2 : Punjab - Maternal and Child Health Service Performance Indicators

Indicador	Punjab 1993	Punjab 1998	India 1998
Malnutrition (<- 2sd) (%)	45.9	28.7	47.0
TFR	2.92	2.21	2.85
IMR	53.7	57.1	67.6
U5MR	68.0	72.1	94.9
No antenatal checkup (%)	12.1	26.0	34.0
Institutional deliveries (%)	24.8	37.4	33.6
Births attended by skilled health staff (%)	48.3	62.6	42.3
Children 12-23 months fully immunized (%)	61.9	72.1	42.0
Children with ARI to health care provider (%)	88.0	93.8	64.0
Access to Improved Sanitation[16]	36.7	51.4	35.9

Source: NFHS-2, 1998/99

[16] % of households with toilet facilities

Health System Inequalities

40. Punjab shows the same acute inequalities as the rest of the country, in terms of distribution of service utilization by socio-economic groups. The health sector largely fails to reach the poor, mostly concentrated among rural populations and schedule castes. The biggest differences are found between the poor and the wealthy, but large differences still abound between those in urban and rural areas and between members of scheduled castes[17], and the rest of the population.

Table 4.3: Maternal and Child Health Service Performance Indicators by Quintile, Caste and Region (1998-99)

	Wealth Quintile		Caste		Region		Total
Indicator	Lowest	Highest	SC/ ST	Non SC/ST	Urban	Rural	
Malnutrition (%)	44.5	10.7	37.3	18.0	18.1	31.9	28.7
No antenatal checkup (%)	45.9	1.5	31.9	18.6	9.7	30.9	26.0
Institutional deliveries (%)	19.0	74.2	25.3	52.6	56.0	31.9	37.4
Non-institutional births-postpartum checkup within 2 months (%)	11.6	48.5	18.3	24.3	40.9	16.4	20.3
Children 12-23 months fully immunized (%)	42.3	100.0	63.0	81.6	83.9	66.3	72.1

Source: NFHS 2 (1998-99)

41. Similar disparities in health coverage appear in the proportion of children immunized between those whose mothers are educated and those that are illiterate. For instance only 19 percent of illiterate mothers have any ante-natal care and only just over half their children are fully immunized. For children whose mothers have more than ten years of education, this figure rises to 94 percent. It is clear that many of these indicators such as education, income and urban location are correlated. However, the numbers indicate that the health system needs to do more to reach the most marginalized and vulnerable groups.

42. **As in other Indian states, public health care expenditure disproportionately benefits the better off segments of society[18]. Overall public health expenditure seem to be markedly regressive for inpatient treatment and deliveries**. In Punjab, while 6 percent of households are considered below the poverty line (BPL) only 1 percent of in-patients treated in public hospitals are from BPL households and only 3 percent of deliveries are by women from BPL households (see Figure 4.1 below). Subsidies for primary care and for other maternal and child health services (such as antenatal care and immunizations) are much better targeted to the poor.

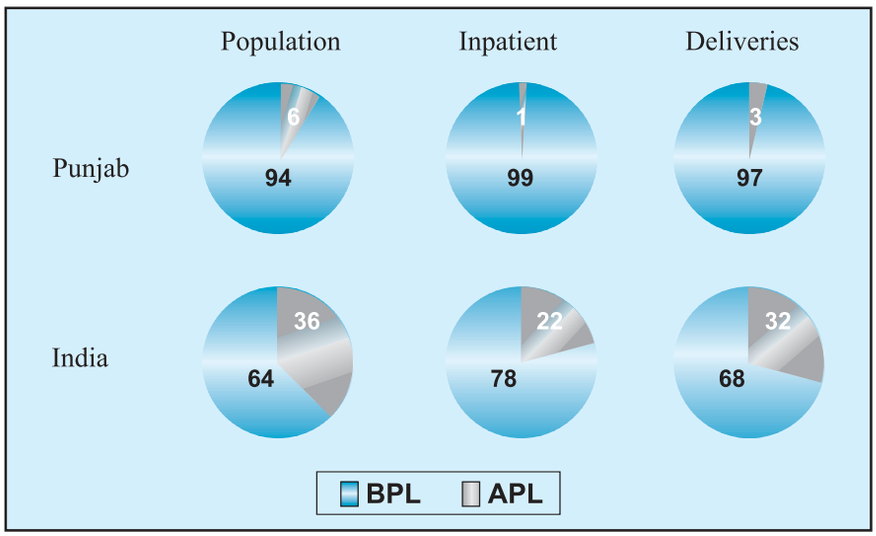
43. There are limited geographic inequalities within Punjab, with the worst performing districts reasonably close to the better performing ones. Several reasons may contribute to this result, including the fact that the state is relatively small and well connected

[17] Punjab is home to the largest proportion of Scheduled Castes (dalits) among Indian states, equal to 35 percent of the total population in 1999-00. By contrast, the Scheduled Tribes population is less tan 1 percent, and there are no tribal areas in the state.

[18] 23 percent of total public subsidies go to the highest expenditure quintile while only 12 percent accrue to the lowest 20 percent of the population.

through a network of roads, and that there are no large forest areas which would be hard to access. The rural areas are fairly ethnically and religiously homogenous and there are no tribal areas. However, the districts close to the border with Pakistan remain the poorest served by the public and private health systems and deserve increased attention in future reforms.

Figure 4.1 : Utilization of public facilities by income



Source: Mahal et al, 2001

Quality of Care

44. Information on the quality of care in the private and public sector comes from a variety of qualitative and quantitative studies, with different methodologies, and of widely varying reliability and accuracy. From the NFHS-2 1998-99 it appears that quality of care is higher in urban areas. In particular, patients find facilities not as clean, and the attitude of staff in the rural areas not as respectful and responsive.

45. Three key issues stand out as obstacles in the government sector; (i) unsuitable timings of both urban and rural public facilities, (ii) lack of attention from unwelcoming staff and (iii) lack of medicines especially in the rural areas.

46. Public facilities in Punjab generally run their out- patient services between 9.00am and 3.00pm Monday to Saturday. Such hours of operation are highly inconvenient especially for those living in rural areas who are mostly involved in farming activities that take place during those hours. After 3.00pm most government facilities at the primary and secondary level are largely deserted and most urgent care required during such hours is sought at private facilities. Private facilities tend to have longer out-patient schedules and even in the evenings doctors are available either on the premises or just a phone call away.

47. About one third of patients in urban areas and one half those in rural areas complained that government health workers are unwelcoming. Anecdotal evidence supports the view that health workers in government facilities often try to discourage poorer (or lower caste) patients from seeking care (see table 4.4).

Table 4.4 : Problems encountered at health facilities (% multiple responses)

Problems	Urban		Rural	
	Govt.	Pvt.	Govt.	Pvt.
No problem	13	59	26	31
Distance	52	16	12	39
Cumbersome procedures	13	7	10	4
Timing unsuitable	35	20	48	27
Unwelcoming staff	32	9	52	13
Non-availability of staff	3	3	7	15
Lack of diagnostic facility	16	15	16	27
Lack of attention	35	12	11	16
Frequent visits for medicine	-	10	11	15
Lack of medicine	23	6	44	15

Source: Survey of Private Practitioners in Punjab, Foundation for research and development of underprivileged groups.

48. With negligible government budgets (Rs 80 million, or 1.5 percent of total in 2003-2004), the lack of medicine at government hospitals is a severe problem in Punjab, as it is all over India. However, the recent experience at facilities run by the Punjab Health Systems Corporation illustrates that patients are willing to pay for medicines provided and that the collection of user-charges can ensure that medicines are well-stocked, which in turn encourages more patients to present at public facilities.

49. When the costs of treatment are examined, it is clear why so many more patients prefer the private sector to government facilities. Exit surveys in Punjab illustrate that although government facilities charge much lower fees, patients are forced to pay high prices for medicines that often have to be purchased through private dispensaries, which again explains why patients complain that drugs are in short supply at government facilities (see table 4.5).

Table 4.5 : Average charges paid for treatment (Rs)

Direct cost of illness	Govt.	Pvt.	Other*
Fees	8	122	18
Medicines	1,048	684	153
Tests	379	231	34
Hospitalization	376	318	60
Total direct costs	1,811	1,355	265

* Includes voluntary and religiously-based organizations.

50. According to the "Survey of Private Practitioners in Punjab, 1999, in general the performance of the private sector tends to be better than that of the public sector. The vast majority of patients (89 percent in urban and 87 percent in rural areas) are very satisfied with the services provided at a particular facility, and only a very small percentage (2 percent in urban and 0.7 percent in rural areas) would not visit the same facility again. Of those that wanted to switch facility, almost 80 percent wanted to switch to another private facility rather than a public facility.

V Punjab Health Systems Corporation

Introduction

51. With World Bank support, in 1996, the government of Punjab embarked on an ambitious program to improve the state's secondary health services. The project has been successful in providing improved secondary infrastructure facilities along with the introduction of important reforms. Today, the most obvious strength of Punjab's public health sector is its revitalized secondary care component. At the same time some key issues remain, and the reform process needs further consolidation.

Achievements

52. The project upgraded 156 secondary level hospitals (including Community Health Centers, Sub-division and District hospitals) and two training institutes. This added approximately 2,100 additional beds in the public sector and provided much needed equipment and medicines.

53. Although most of the project funds have been spent on physical additions (74 percent) to CHCs and sub-division hospitals, it is the reforms that have had the largest impact on health outcomes. The reforms are highlighted below and include;

- Establishment of the Punjab Health Systems Corporation,
- Introduction of user fees and greater hospital autonomy,
- Improved management and training

Establishment of the Punjab Health Systems Corporation (PHSC)

54. The project introduced the Punjab Health Systems Corporation (PHSC) to run the secondary facilities. This brought them outside the remit of the usual government bureaucracy. The PHSC is competently staffed and has greater financial and administrative autonomy. Along with more flexibility came more accountability. The Corporation has undertaken a number of strategic studies that will help government to take a broader view of the whole health sector as well as its own facilities, such as the comprehensive review of the private sector including informal providers. A number of other studies on maternal deaths, drug availability, utilization of services and health insurance have provided government with a rich information base on which to design and implement future reforms.

Introduction of user fees and greater hospital autonomy

55. **User-charges were introduced at all the facilities under the control of the PHSC**. The fees are posted on the walls of the facility which creates greater transparency. The revenue generated from user charges has been retained at the hospital level to provide drugs, patient facilities, equipment and building maintenance. Revenues from user charges have risen dramatically since 1996/7 when they were Rs 4.1 million, to over Rs 100 million in 2002/3. Despite accounting for no more than 2 percent of the overall health budget, user-charges have made a dramatic difference to the quality and level of services provided at the secondary level where they account for approximately 7 percent of total spending.

56. **User charges have increased flexibility in managing hospital facilities.** User charges have allowed hospitals to raise their own funds for essential items that government has been unwilling to budget sufficiently for e.g. maintenance, drugs etc. Secondly, although the broad allocation of user charges is fixed at the overall level, the hospital managers have been provided with increased autonomy to procure medicines, materials and repairs. This has resulted in an end to the situation where breakdowns in equipment would take months to resolve. One doctor summed up the situation in the following manner, "before the corporation was established we had to write a letter requesting permission to buy a single bar of soap". Now Senior Medical Officers are allowed to sanction up to Rs 5,000 expenditure and Civil Surgeons up to Rs 10,000.

Table 5.1 : User charges FY 2000/01 – 2003/03 (audited; Rs. Million)

	2000-01	2001-02	2002-03	% increase 02-03 / 00-01
Receipts	43.5	76.1	104.7	38
Expenditure				
Drugs	18.8	23.5	34.9	48
Patient facilities	10.8	21.3	36.9	74
Maintenance	5.2	8.1	12.8	58
Equipment	3.0	4.9	60.4	23
Total	**37.8**	**57.8**	**90.6**	**57**

Source : Punjab Health Systems Corporation

Improved management and training

57. **The project established an HMIS system to provide timely and accurate information needed to improve management of health facilities.** Improved management cannot be accomplished in the absence of data on health system performance indicators. Prior to the project's establishment, there was no performance culture in the ministry. Without computerization of records and a strong MIS system, records were irregular and erratic implying that management was not in a position to take rational decisions to improve the system. The project solved this problem by establishing a systematic Health Management Information System. With the computerization of the 50 larger hospitals and systematic record-keeping and data entry at other facilities the corporation had the ability to monitor inputs and outputs of the system and help managers set basic targets for their facilities. The Corporation has also developed its own website to disseminate information at www.punjabhealth.org.

58. **Measuring performance provides an incentive to improve performance.** In addition to establishing a computerized system, the corporation also imparted training in HMIS and introduced a team of statistical analysts at the district level. Regular inspections and a feedback mechanism for quality assurance have succeeded in establishing a continuous supply of timely accurate statistics. Establishing the HMIS system not only provided management with good quality information on which to base their decisions, it also provided

doctors with an incentive to improve their performance now that it was being accurately measured for the first time. Each hospital is graded between A+ to D creating a positive peer pressure and increased awareness among service providers. The Corporation also introduced non-monetary incentives such as letter of appreciation to the small percentage of doctors that exceeded their benchmarks by five times of more.

59. **Outsourcing sanitation has resulted in the cleanest hospitals in India.** The PHSC introduced increased private sector participation where appropriate and private sector management techniques wherever possible. One of the first steps undertaken in this regard was the outsourcing of sanitation services which was contracted out to the private sector. The result is truly impressive; the 58 public sector hospitals that have adopted the outsourcing model are among the cleanest in India. Several unannounced visits to various facilities indicated that the hospitals were thoroughly cleaned and disinfected on a regular basis to the standards found in the best private hospitals. A recent patient survey indicated 71 percent of PHSC patients were satisfied with the cleanliness of the toilets compared to 42 percent in non-PHSC facilities. The Corporation has also successfully outsourced maintenance and ambulance services; the latter are now run at cost charging Rs 3.5 per km.

60. **Introduction of bio-waste management techniques.** The Corporation also introduced improved bio waste management techniques separating hospital waste into three categories of (i) hazardous materials, (ii) infectious waste and (iii) generic waste. This system is working well throughout the corporation facilities with only a small number of exceptions that were identified in a recent health audit.

Patient Satisfaction Surveys

61. Patient satisfaction has emerged as an important indicator to determine and evaluate the quality of care. It is also an important indicator of patient demand. Undertaking a series of patient surveys has enabled the Corporation to see its facilities as patients see them and to respond to patients as customers.

62. The surveys illustrate that patients do not travel far to visit the PHSC hospitals. More than 2/3rd of patients live within 5 km and about 80 percent live within 10 km of the PHSC facility. In patients and those visiting district hospitals are likely to travel further than outpatients or those visiting Community Health Centres. About one quarter of patients travel to the hospital on foot and yet almost half the out patients reach the facilities within 15 minutes. In patients traveling to PHSC hospitals took on average 30 minutes to reach the facilities, approximately the same time taken to reach non-PHSC facilities.

63. The surveys also illustrate that the prime reason that patients attend the PHSC facilities is the inexpensive cost (31 percent) followed by the availability of skilled doctors (23 percent). Moreover, patients did appreciate availably of diagnostic facilities (78% vs. 33%) and quality of building (98% vs. 67%). Also, behavior of staff and availability of drugs seems to be better in PHSC facilities. In general the patients were satisfied with most aspects of their experience in PHSC hospitals, and satisfaction rates were almost always higher for PHSC run hospitals than non-PHSC facilities (see Table 5.3 below).

Table 5.2 : Patient satisfaction at PHSC and non-PHSC hospitals

Selected Indicators	PHSC	Non-PHSC
Clean toilets	71.3	42.3
Canteen	17.9	3.0
Quality of drugs	92.4	79.1
Availability of essential drugs	65.8	50.0
Availability of diagnostic facilities	77.7	33.3
Quality of building	98.1	66.7
Behaviour of nursing staff	94.6	83.3
Waiting time justified	64.9	71.4
Costs of x-ray is too high	6.4	0.0

Source: IIHM Patient Satisfaction Survey

64. The surveys undertaken to date cast the Corporation in a good light and are largely consistent with our recent field visits. However, the surveys themselves should be strengthened to incorporate best practice techniques that are not yet being used e.g. random sampling, proportional weighting and interviewing patients at home rather than inside the facilities. The Corporation should also adopt a standardized core questionnaire to allow for tracking of key indicators and perceptions over time.

65. The surveys also provide PHSC management with a number of other suggestions for better managing queues e.g. at the pharmacy, long lines could be reduced by separating lines for drugs for common ailments from other lines. A location-wise analysis undertaken on behalf of the Corporation by PricewaterhouseCoopers indicates that the PHSC should make gynaecology, maternity and paediatric facilities available in all hospitals. About a third of patients also raised concerns about the politeness of nurses and pharmacists. If such feedback was automatically collected at time of discharge it could feed into a performance review system. Patients also complained about the lack of canteen and telephone facilities these could easily be outsourced to private providers in the face of such a high demand.

Outcome of the reform program

66. **The outcome of the reform program has been impressive, by any standards**. Table 5.2 indicates the tremendous increases in key performance indicators during the first seven years of the reform program. The number of patients attending secondary care facilities has increased significantly during the last few years. The secondary health care facilities run by the corporation are now dealing with almost 8.5 million out patients each year, from a total population of approximately 24 million. The table also illustrates that the number of lab tests and diagnostic tests has also shot up dramatically.

67. **Patients have not been discouraged from attending by the introduction of user charges**. The introduction of a systematic and transparent set of user-charges has witnessed large increases in the number of patients attending PHSC run facilities. There are several reasons for this. Firstly, the official fees may have partially substituted the informal payments which patients were accustomed to pay prior to the reforms. Secondly, and perhaps more importantly, in a relatively wealthy state such as Punjab, patients would prefer to pay a fee for service rather than accept the corollary no-fee / no-service which was the situation prior to the reforms.

68. **The effect of user-charges on the poor needs to be continually monitored.** There is every indication that the amount of user-charges raised is reasonable at between Rs6-Rs21 per patient depending on level of hospital. Moreover the chief medical officer at each hospital has the authority to reduce or waive charges completely for those that s/he feels are unable to pay which implies that the poor can still receive free services in public facilities. All yellow cardholders (BPL) are provided with free treatment. However, this situation needs to be monitored carefully as a recent survey of out patients showed that only 36 percent were illiterate and only 15 percent were from scheduled castes compared to 45 percent and 29 percent in non PHSC facilities.

Table 5.3 : PHSC key performance indicators 1996 - 2003

Performance Indicators	1996	2001	2002	2003	Increase 2003 over 2001 (%)
OPD	5,197,689	6,869,431	7,813,882	8,421,668	23%
No. surgeries	39,916	145,754	159,868	229,754	58%
No. deliveries	18,026	19,914	22,242	27,001	36%
No. of x-rays	101,037	277,048	442,400	462,002	67%
No. of lab tests	278,092	1,651,375	2,180,278	3,008,639	82%
Other diagnostic tests	301,836	1,983,736	2,743,681	3,559,937	79%

Source: Punjab Health Systems Corporation

69. **User fees have been used to provide facilities with a budget for maintenance and equipment.** The revenues generated by user fees were kept by each facility and spent on drugs, equipment, supplies and maintenance. All of these were essential items that had received little or no funding previously. As patients realized that public facilities were better stocked and began to function they returned in droves to utilize these facilities – rather than discourage patients from presenting, user-fees had the opposite effect, because they allowed to improve services significantly.

70. **Improved public services are providing competition to the private sector.** Government officials report that as first rate diagnostic facilities were introduced in government hospitals at reasonable prices, the market rates for common health checks and investigations has also come down. A government document states that the market rates of ECG have come down from Rs120 to Rs60, the rate for Ultrasound from Rs. 450 to 150, and the rate of an X-ray from Rs100 to Rs60. Given the increase in OPD numbers, it is undeniable that the improved public sector facilities are providing increased competition for the private sector and there are anecdotes that one or two private sector clinics have closed following increased competition from the newly renovated PHSC hospitals.

Outstanding issues

Improper and under utilization of facilities

71. **Under utilization of the secondary care facilities**. Although the Corporation oversaw a tremendous increase in the number of in-patient beds available at the secondary level, there are signs that these beds are still not being well utilized. The official bed occupancy figures for the PHSC facilities hover around the 50 percent mark. Following are the official figures for BOR, and Average Length of Stay received from the Corporation

Table 5.4 : Bed Occupancy Rates and Average Length of Stay in hospitals (%, 2003)

Selected Indicators	District Hospitals	Sub-divisional hospitals	Community Health centres	Total
BOR	70.56	57.14	23.43	49.3
AVLS	4.27	3.53	2.18	3.43

Source: Punjab Health Systems Corporation

72. However, our unannounced visits during the evenings contradict this figure. Several visits to 30-50 bed CHCs close to Chandigarh revealed largely empty facilities. The overall impression from field visits is that the new facilities are being run as successful OPD centers that also cater for minor surgeries such as tubectomy, appendectomy, vasectomy etc. This is compatible with the average length of stay for in-patients at 3 days. It is also consistent with a recent facility survey in which doctors reported that about 27 percent of cases seen at the PHSC facilities could have been treated at the primary level.[19] One objection to the team's findings is that the facilities visited, mostly in the area proximate to Chandigarh, are not representative for the state of Punjab, because of the high income per capita and the high concentration of private secondary and tertiary facilities near the capital.

73. **PHSC hospitals are being used as a first port of call.** The facilities are well utilized during OPD consultation hours, usually between 9.00am and 3.00pm. In the CHCs and sub-division hospitals in the late afternoon, the patients disperse as all but one doctor leaves the building and a skeleton staff is left to run the facility. Most "in-patients" leave the hospital only to return the next day. The relatively good road network and patients' purchasing power means that it is easier to go home where they can be cared for by family members rather than staying in deserted and potentially dangerous facilities where little or no care is provided "after-hours".

74. **Increased capacity has not yet led to a sufficient increase in institutional deliveries.** Partly due to the problems outlined above the PHSC run hospitals currently at 27,000 deliveries per year or just 2-3 percent of the total births in the state. The secondary facilities have not yet been able to take on the role of providers of emergency obstetric care, which they were meant to assume. Lack of key specialist staff, such as anesthesiologists and gynecologists, lack of support staff, lack of key medicines and other supplies, dual-job holding by most doctors, all these factors have hampered the full utilization of the secondary care facilities. The district and sub-district hospitals are doing better than the sub-division and CHCs hospitals.

75. **Although the number of tests has increased remarkably there is still room for growth and there are remaining questions over test quality.** There are still indications that a number of those that attend the facilities for out patient consultation are still choosing to have tests and other services undertaken in the private sector. A recent survey illustrated that PHSC patients incur an average cost of Rs 219 on diagnostic tests done privately compared to Rs 91 for those visiting non-PHSC facilities.

Lack of broad ownership of the reforms

76. Most of the ongoing and contemplated reform ideas, such as alternative modes of financing health care, involving private sector in public health, have been initiated as a result of the World Bank's dialogue with the PHSC and the State Government. There is little capacity at

[19] Survey of Patient Satisfaction in Project and Non-Project Hospitals, Indian Institute of Health Management Research, 2003.

the Department of Health for strategic thinking. The PHSC has taken the leadership for the reforms, and these have until now been limited to the secondary sector.

77. The ownership of reform programs remains weak and their implementation lacks vigor. Outside of the reforms introduced by the PHSC, the rest of the health sector has stagnated during the past few years. The existing style of governance and the overall culture in which the bureaucracy operates does not provide incentive for creative thinking or innovation. The general tendency among many is to protect the status quo. There is a very limited scope for mutual learning or combined thinking as there is limited interaction among various functionaries in the sector. Incentives for top level bureaucrats are not conducive to addressing sector policy or strategic issues. A few individuals who may be orientated to strategic thinking are unable to make significant difference because of the general culture and short tenures.

Need for continuity in the PHSC, and for integration with the rest of the DoH&FW

78. PHSC has been the main driving force behind the improved service delivery at the secondary level. It enjoys a certain amount of financial and administrative flexibility that has contributed to its attainments. It has a core team comprising highly competent staff that has managed to sustain the pace of improvements despite fast turnover of its chief executive. The Corporation also has had the great advantage of technical and strategic guidance from the World Bank staff. If at the close of the project the Corporation is discontinued there is a serious risk of losing the gains it has made in the secondary level care, and it will lead to the slackening of the ongoing reform measures. Besides the WB project, the PHSC has already implemented various other projects worth Rs. 1380 million[20].

79. Apart from capital expenditure and the salary component of the existing staff on the roles of the State Govt. PHSC is spending around Rs. 281,2 million on the hospitals, out of which Rs. 135 million is being met out of the user charges, and rest Rs. 146.2 million from the World Bank assistance. This will be over by 30.3.04, and after that the PHSC expenditure will entirely be the responsibility of the State Govt. Rs. 110.7 million of the additional 146.2 million expenses pertain to the committed obligations to be fulfilled for management of the secondary level hospitals, till the hospitals recover such amounts by indexing their user charges in the next five years. Thus, in order to continue the additional capacity created as a corporate structure, only an amount of Rs. 35.5 million is required. This is hardly any significant amount which should be provided by the State Govt.

80. Over the long term, the question arises as to whether continuing such bifurcated management structure in the government health sector is desirable or not. The new managerial style initiated through the PHSC needs to be consolidated and to progressively be extended to the whole Department of Health.

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[20] The PHSC is currently implementing the following projects:

i) Formulation of the project for restructuring and strengthening of primary health care in the State.

ii) Construction of Punjab Institute of Medical Sciences Jalandhar.

iii) Construction of Institute of Mental Health, Amritsar.

iv) Construction of CHC Mehraj

v) Construction of CHCs, Dinanagar, Bhaini Mian Khan, and Patran

viii) Construction & designing of centres for Punjab Pollution Control Board.

ix) RCH Project (Sub Component)

x) Health Insurance Scheme for the State.

VI The Way Forward

Introduction

81. The preceding sections have highlighted that Punjab health outcomes are better than Indian averages. However, the state lags behind other states at similar level of income and socio-economic development. While spending more per capita than almost any other state, Punjab's health indicators are no better than the better performing states in India that spend far less on health inputs. The most serious challenges for Punjab come in the areas of maternal and child health, and in the prevention of non-communicable diseases.

82. Institutional births account for only 37 percent of the total, while 37.4 percent of all deliveries are not attended by any health personnel, 25 percent of children are malnourished and the state has not been able to significantly reduce infant and under-five mortality rates over the 1990s. Finally, the tragedy of female feticide and infanticide continue to haunt the state which has by far the lowest sex ratio in the country and there are strong indications that the situation is deteriorating rapidly.

83. At the same time, there is an emerging burden from non-communicable and chronic diseases, particularly cardiovascular disease, to which the state is not yet responding, or responding adequately.

84. **The key issue to address in Punjab is poor quality of services.** In the public sector, the deterioration of services is extremely severe, particularly in primary care. It is due to a number of factors, some of which affect to a less extent also the secondary and tertiary sector, all of which can be summarized as insufficient spending, poor allocation of public spending, and lack of sound management, which leads to a high level of general apathy to a non-functioning system.

85. Current spending patterns show that too little money is being spent by the state government on health care, overall less than 4 percent of the total state budget. Moreover, the release of approved funds is often held up due to overall budgetary shortages.

86. A closer look at state health expenditures reveals some of the issues. Despite allocating 55 percent of spending to the primary level, the system of PHCs and Subcenters is not functioning effectively. Part of this reason stems from the distribution of spending where more than 93 percent of state health spending falls on salaries. Such a high percentage of spending on salaries has squeezed spending on drugs, while the allocations to maintenance, minor works and vehicles have been completely eliminated from recent budgets.

87. There is also a lack of coordination between the primary, secondary and tertiary level, and the referral system is practically non-existent. The tertiary care level facilities and the district and sub-district hospitals bear the burden of the existing poor referral system, the lack of coordination with, and the dysfunctional nature of lower level facilities. 99 percent of inpatient days, 79 percent of outpatient days and 87 percent of inpatient days for childbirth take place in hospitals, versus other public facilities (Mahal, 2001).

88. In addition, there is no accountability or performance culture. So, a significant part of spending on salaries is actually wasted, because health staff are unavailable, or not performing their duties satisfactorily. The system does not have any mechanism to reward good performance, and to hold staff accountable.

89. **Simply improving the functioning of public health care provision alone is not enough to improve health outcomes in a state in which 86 percent of out patient and 65 percent of in-patient care is delivered by the private sector.** Government will have to improve its stewardship over the whole health care sector. There are a number of opportunities for improved health care by adopting private sector management techniques and pioneering public private partnerships in the state.

90. The remainder of this section provides policy recommendations, first those valid for the whole sector, which include:

- Improving Stewardship and Management;
- Engaging the Private Sector
- Strengthening Health Care Financing;
- Other interventions
    - o Disease prevention
    - o Primary Health Care
    - o Secondary Health Care

Improving Stewardship and Management

Strengthening Government's Oversight Role

91. The state does not have a long term policy or articulated vision for the sector, although one is planned. Strategic planning and stewardship over the whole sector are non-existent outside the Corporation. The organizational structure of state Government of Punjab lacks a strong unit that can analyze health system performance and key health system strategies such as health financing. An organizational locus for monitoring and evaluation of health system development and consequent use of that information in policy design is also lacking.

92. Along with this lack of organizational structure as a base for the government's stewardship role, there is also limited training and technical capacity amongst senior and mid-level officers to design, plan, implement, and evaluate major health system innovations such as health financing reform, or engagement of private providers in the provision of essential services.

93. The government should review its structure, and consider what organizational and capacity building strategies could be proposed to address the above deficiency. Possible actions to be considered include: developing a health policy and planning cell within the Department of Health, and establishing a health policy institute outside of the government organizations and contracting out specific work.

94. The Department of Health also needs to draft a policy paper for the sector, focusing on the primary level. This can be contracted out to a consultant but the ownership of the content must reside with the Department and the resulting paper would need to have

wide-scale stakeholder consultation and debate before being adopted and approved by the State legislature.

Improving management

95. Management in the mainstream public sector is extremely weak. Government officials are given little leeway for improving the existing system and there are few incentives for reform minded officials to push for improvements. The current health care delivery system (excluding the recent changes in secondary care) exists by default rather than design. It this situation it is suggested that government;

- **Re-orient the public sector towards a results-based system:** Drawing on its recent experience in secondary health reforms, Government needs to strengthen its planning and performance management system. It can develop service delivery indicators for monitoring impact and prepare decentralized "District Health Plans" and "Budgets".
- **Improve human resource management:** In particular government could assess needs and strategies for continuous in-service training, assess needs and strategies for organizational and management development and develop strategies for establishing PHC teams, promoting teamwork, implement individual and team incentives linked to performance, and accountability.
- **Increase capacity for strategic planning:** Either by augmenting the role of the Corporation or by drafting in competent managers to the Department of Health and Family Welfare. This process should start with a realization that good doctors do not necessarily make for good managers. The skills required to be an eye surgeon are entirely different from those required to manage public health care. As such top level positions in the department need to be filled with excellent managers, public health specialists and health economists in addition to doctors.

Engaging the Private Sector

The formal private sector

96. Government is responsible for health outcomes in the state. However, the majority of Punjab's health care is provided by the private sector. This points to the need to engage the private sector in order to improve health outcomes in future. The Corporation has made a start in this effort by commissioning a comprehensive research report on the private sector. The Corporation has also developed a public private partnership proposal with the aid of the state's Infrastructure Development Corporation.

97. Private sector providers in Punjab include a number of efficient and scrupulous outfits that are currently focused on urban sector secondary and tertiary care. However, many of these organizations are willing to support primary health care on a fee for service basis. Government currently sees such a course of action as "providing subsidies or grants for the private sector". It is highly suspicious of the motives of the private sector. Undoubtedly unprincipled private sector operators do exist. However, government could consider opening a dialogue with interested private sector representatives to explore possibilities of partnering to improve primary health care.

98. In particular government could consider involving NGOs and private for-profit providers in primary health care delivery through contracting models:

- **NGOs**. Although government officials state that NGOs are not very active in Punjab, a recent survey revealed that there are 32 urban and 8 rural hospitals run by NGOs with a combined bed strength of 3,828 or close to 20 percent of public sector hospital beds. There are a number of primary, voluntary health facilities run by Mandirs and Gurdwaras in the state and government can tap into these resources to improve health outcomes.
- **Private for profit providers:** Several Indian states and pilots in other countries have shown that involving the private sector in primary health care can lead to greatly improved efficiency. Non governmental bodies can greatly improve health system outputs often making do with a fraction of the existing government budget. It is worth exploring and piloting these issues given the level of sophistication and the administrative capacity of the state.

What can be done about informal providers?

99. In the long term, Informal providers will inevitably disappear as factors on the supply side (improving availability and functioning of public sector facilities along with increased harassment of unregistered practitioners) as well as demand side (improved patient awareness and education) squeeze their practices. However, in the short to medium term there are a number of options for dealing with them. Each has its pros and cons.

- **Ignore:** The current situation in which the Supreme Court has outlawed all Informal providers but government lacks the manpower and perhaps the will power to implement the decision results in the continued practice of Informal providers. This has the advantage that it leaves in place a system of first call for many in rural areas. However, the down-side means that Informal providers continue to practice irrational medicine. Informal providers endanger their patients' health by unnecessary and often unsanitary injections, over-prescription of antibiotics, (often prescribing an incomplete course for those that cannot afford a full course of treatment) and dangerous interventions such as intravenous drips for minor dehydrations. At best the public are simply wasting their time receiving a placebo and a comforting chat, at worst they are exposing themselves to serious diseases and contra-indicated medication.
- **Involve:** Some stakeholders have suggested that all quacks could be mainstreamed and trained as general health workers. Each PHC covers around 30-35 villages and would therefore be likely to include an area in which up to 80 quacks are operating. They could be brought under the control and supervision of a qualified doctor at the PHC. Although this idea seems appealing at first, it might prove unworkable in practice as quacks are well paid making between Rs.5-10,000 per month in consultations and several times that in referral commissions. They will not be willing to be mainstreamed if that would result in a reduction in their incomes. Moreover, qualified doctors at the PHC are not effectively supervising the PHC staff much less a large number of unqualified practitioners in remote rural areas.
- **Educate:** Quacks are meeting a demand for health care in rural areas. Communities would like to have reliable care available. However, they are poorly educated and cannot tell whether they are receiving good service or not. A mass education campaign could be useful to both increase awareness of common illnesses and simultaneously raise awareness of the dangers of quackery.

- **Franchise:** Involving Informal providers in a franchise scheme has a number of advantages. It can train the Informal providers to provide useful services such as family planning products and advice. It is usually tied with a mass marketing campaign that can also raise awareness. However, such a program cannot reduce the irrational activities of Informal providers.

100. Any successful course of action will have to address the realities of the political economy of rural villages. Following on from the Supreme Court's various edicts concerning quackery, the High Court of Punjab passed a ruling to "weed out quacks from rural areas". However, government is unwilling to implement this decision for the simple reason that Informal providers constitute an important vote bank and are closely connected to the Panchayati Raj in most villages. They outnumber qualified doctors by at least 10:1 and therefore wield considerable political clout.

101. In some areas, quacks are so powerful and well entrenched in the local community that they are able to drive out qualified public sector doctors that threaten them. In other communities, Informal providers build lucrative symbiotic referral relationships with unscrupulous private sector doctors. They are often careful to share a percentage of their profits with the local police and elected officials to ensure that these groups turn a blind eye to their practices.

Strengthening Health Care Financing

102. Strengthening health care financing includes both improving financial management and allocation criteria, as well as strengthening revenue collection, by developing the health insurance market and risk-protection schemes. The agreed emphasis on strengthening health insurance must be based in a larger health system financing strategy, which addresses the government's overall goals of improving health outcomes, is logically consistent, and fiscally and administratively sustainable. The development of a health financing strategy requires sound information and evidence and would include:

- **Health Public Expenditure Review (HPER):** a HPER is meant to improve our evidence basis on the flow of funds with the public system, and should include a public expenditure management review, to understand at which levels and according to which criteria decisions concerning allocation of public resources for health are taken.
- **Health Accounts (NHA):** a NHA is needed to better understand the flow of funds within the health sector, including private sources of financing and private providers.
- **Analysis of existing risk-pooling/health insurance schemes.** As we saw in Chapter 2, OOP are estimated to finance approximately 70 %of health expenditures in the state, and health insurance is in its infancy. The analysis should form the basis for a new strategy aimed at mobilizing more resources for health on a prepaid basis, pooling them, allocating them effectively, and using payment and purchasing methods to achieve priority health goals.
- **Development of a medium term fiscal plan for health (MTFP):** a MTFP is needed as a means to develop strategic financial planning, and to use health financing tools in a well-planned and focused way to improve the priority outcomes set out for the health sector.

Other Interventions

Strengthening disease prevention and health promotion activities

103. The public sector in Punjab has focused largely on providing curative and family planning services to individuals, with less emphasis on population-based services that seek to reduce the exposure to disease of the population as a whole, for example health promotion and education campaigns, and anti-tobacco initiatives. As a result, levels of morbidity and mortality remain high, and in particular the burden from non-communicable diseases and from injuries and accidents are increasing. To strengthen public health functions, the Department of Health would need to undertake the following: (i) review and revise the public health roles and responsibilities of the various levels and agencies (state and local health authorities, local government, communities) for public health programs, (ii) develop strategies for generating demand and increasing social accountability (iii) identify better mechanisms for improving coordination between various sectors and agencies, for instance for improving road safety, or reducing pollution; (iv) review and modify the Public Health Act and related legislation and mechanisms to implement them.

104. **There is also a specific need to strengthen the Drug and Food Organization.** Presently, there are 226 Drug Manufacturing Units, 71 Cosmetic Manufacturing Units, 68 Blood Banks and 20000 Chemists operating in the State. The Department of Health issues licenses to such institutions, monitors their operations, and from time to time launches prosecution proceedings against the defaulters under the Drug and Cosmetic Act, 1940 and allied Acts. However, there is acute shortage of manpower in the Drug Control Organization and State Testing laboratory to achieve above objectives, and the risk of consuming spurious drugs is widespread.

Primary Health Care

105. Primary care is currently the weakest part of the public sector, and so improving it should be the focus of future efforts in order to achieve better health outcomes. A recent evaluation reported that primary health care facilities suffered from high rates of absenteeism, frequent transfers, mismatched staffing, gross under-utilization of facilities, and lack of basic equipment.[21] Sub-centre based field workers are not performing their domiciliary duties. The NFHS-2, 1998, found that only 2 percent of women report having received a home visit from a health or family planning worker in the 12 months preceding the survey. Senior health officials confirm that the supervision system has broken down.

106. What is needed in such an environment is improved management and oversight of the whole system, the introduction of a performance culture, the measurement and accountability for inputs, outputs and outcomes. We have already discussed these reforms, which should be applied across the whole sector. More specific to primary care is the issue of decentralization, as Government is examining the possibility of involving the Panchayati Raj in a decentralized system of supervision of field staff.

107. While decentralization provides many opportunities, taking advantage of them requires a set of skills that may be unavailable at the district-level. Decentralization must be accompanied by human resource development in areas such as management, budgeting,

[21] Punjab Economic and Statistical Organization.

strategic planning, and advocacy. Specifically, the reform would be based on following major components:

- An effective mechanism should be developed to track the flow of funds down to actual delivery points. For this, a costing-based accounts information system needs to be designed to easily identify the efficiency in utilization of fund.
- There should be an integrated budget at the district level, eliminating the current fragmentation, and assuring more transparent lines of accountability. The budget should be based on the needs of peripheral health units, which, in turn would be linked to the inputs from other social sectors, as well as the community.
- A process of orientation and capacity building for district health managers needs to be initiated to help them focus on the link between health impact and funds allocated.
- Panchayats' effective involvement in the process of health planning and implementation should be accompanied by increased financing responsibility. Panchayats could finance part of non-salary recurrent cost in the PHCs.

108. There is also need to strengthen the Urban Health Care services specifically in slum areas. This will have an impact on infant mortality rates and other priority health indicators. Most of slum areas are created around development pockets and such slum areas keep on shifting from one place to other. Creation of civil infrastructure will not be advisable. The government can think of creating urban slum area dispensaries, and for outsourcing service delivery following the example of Andhra Pradesh. Also, fair price shops for drugs can be established, where generic drugs and free drugs to the eligible categories could be provided.

109. **Improve quality of services**. In synthesis, any sound strategy to revitalize the primary care sector must be focused on improving quality of services; key aspects include better incentives and accountability mechanisms for human resources, increased allocation for drugs, maintenance, and other key inputs, greater community participation in services' monitoring and evaluation, and in the long term, also in services' planning.

Secondary Health Care

110. As highlighted above, Punjab has made tremendous strides in secondary health care during the last 8 years. It is important that these gains are institutionalized.

- **Institutionalize the PHSC**: The Corporation has been the main driving force behind improved service delivery at the secondary level. The Corporation is due to be wound up as the project that supported closes in 2004. It is vital that the successful innovations and reforms that the Corporation introduced are protected either through a continuation of the Corporation or the adoption of the Corporation structure and *modus operandi* within the Department of Health and Family Welfare.
- **Restructure budget spending:** The current situation in which there is no budgetary allocation for minor works, maintenance or repairs is unsustainable. There is a temptation for government officials to ignore this situation as the secondary facilities are new and user-charges are being used to purchase vital drugs and supplies. This situation is untenable in the long run and must be rectified as soon as possible.

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Annex 1

Table A1: Sources of health care- Rural

PUNJAB 1998 – Percent distribution of households by main source of health care when household members fall sick, according to quintile and caste								
	Quintile					Caste		
Source	Lowest	Q2	Q3	Q4	Highest	SC/ ST	Non SC/ST	Total
Public medical sector	16.9	16.0	13.0	12.7	11.2	16.8	11.3	14.2
Govt./municipalHospital	8.2	8.8	7.1	8.3	7.0	9.1	6.6	7.9
NGO or trust	0.0	0.3	0.3	0.0	0.0	0.1	0.1	0.1
Pvt. medical sector	83.1	83.5	86.7	87.0	88.2	82.9	88.4	85.5
Pvt. hospital/clinic	34.7	35.2	36.9	42.5	42.0	33.7	42.8	38.0
Other source	0.0	0.2	0.0	0.3	0.6	0.2	0.2	0.2
Number of HHs	470	428	396	389	354	1072	965	2037

Source: NFHS –1998-99

Table A2: Sources of health care Urban

PUNJAB 1998 – Percent distribution of households by main source of health care when household members fall sick, according to quintile and caste								
	Quintile					Caste		
Source	Lowest	Q2	Q3	Q4	Highest	SC/ ST	Non SC/ST	Total
Public medical sector	17.4	11.9	14.0	12.8	8.9	13.8	12.7	13.0
Govt.Hospital	12.5	8.6	13.0	10.8	6.0	10.7	10.0	10.2
NGO or trust	0.4	0.5	0.0	0.5	0.0	0.6	0.1	0.3
Pvt. medical sector	82.1	87.6	86.1	86.7	90.7	85.7	87.1	86.6
Pvt. hospital/clinic	26.4	38.6	41.4	44.4	42.6	36.9	39.4	38.5
Other source	0.0	0.0	0.0	0.0	0.5	0.0	0.1	0.1
Number of HHs	196	183	187	177	187	311	619	930

Source: NFHS –1998-99

Table A3 : Specialists and other practitioners in private facilities in Punjab

	Regular	Part-time and visiting	Total
Medicine	987	68	1,055
Surgery	371	327	698
Obst. & gyn	553	63	616
Pediatric	110	54	164
Ortho	99	50	149
ENT	41	38	79
Eye	720	31	751
Anesthesia	61	91	152
Radiology	56	10	66
Pathology	43	10	53
Skin/burn/STD	240	8	248
Chest	46	10	56
Dental*	489	34	523
Psychiatry	29	3	32
Other Specs	100	27	127
General**	2,881	146	3,027
Total	**6,826**	**970**	**7,796**

* Includes BDS
** Includes MBBS, BAMS, GAMS and DHMS etc.
Source: Survey of private practitioners in Punjab, Foundation for research and development of underprivileged groups

Table A4: Punjab 1998, Perceived Quality of Care-Urban*

Quality indicator	Quintile					Caste		
	Lowest	Q2	Q3	Q4	Highest	SC/ ST	Non SC/ST	Total
Percentage who received the service they went for	99.3	100.0	99.4	99.5	100.0	99.7	99.6	99.7
Percentage who said the staff spent enough time with them	98.6	99.4	100.0	100.0	100.0	99.0	100.0	99.7
Percentage who said the staff talked to them nicely	80.1	81.4	84.9	83.5	93.9	83.0	86.1	85.1
Percentage who said the staff respected their need for privacy	83.9	90.6	91.9	94.6	98.6	89.2	94.3	92.6
Percentage who rated facility as very clean	61.8	70.0	73.3	74.9	81.2	68.9	74.8	72.7
Number of women	122	145	149	153	156	251	474	725

* Among ever-married women, indicators of quality of care during the most recent visit to a health facility in the 12 months preceding the survey by quintile and caste

Table A5: Punjab 1998, Perceived Quality of Care-Rural*

Quality indicator	Quintile					Caste		
	Lowest	Q2	Q3	Q4	Highest	SC/ ST	Non SC/ST	Total
Percentage who received the service they went for	99.6	99.6	99.4	99.7	99.7	99.6	99.6	99.6
Percentage who said the staff spent enough time with them	97.3	97.1	98.4	98.0	99.3	98.0	98.2	98.1
Percentage who said the staff talked to them nicely	73.1	71.1	75.9	83.3	80.0	72.9	80.8	76.8
Percentage who said the staff respected their need for privacy	65.2	83.1	78.1	85.5	83.8	78.7	80.4	79.5
Percentage who rated facility as very clean	48.1	59.4	60.8	66.0	66.5	54.9	66.1	60.5
Number of women	279	297	328	319	311	771	763	1534

* Among ever-married women, indicators of quality of care during the most recent visit to a health facility in the 12 months preceding the survey by quintile and caste.