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Health, Equity and Poverty Exploring the Links in West Bengal, India

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Abbreviations

BE	Budget Estimates
BPHC	Block Primary Health Centre
BPL	Below Poverty Line
CI	Concentration Index
CMOH	Chief Medical Officer, Health
DFID	Department for International Development
DH	District Hospital
DHF	District Health Fund
DHFWS	District Health and Family Welfare Society (Samity)
DoHFW	Department of Health and Family Welfare
EDL	Essential Drug List
FHS	Future Health System
FW	Family Welfare
GoI	Government of India
GoWB	Government of West Bengal
HSDI	Health System Development Initiative
HMIS	Health Management Information System
IEC	Information, Education, and Communication
IIHMR	Institute of Health Management Research
IPD	In-patient Department
JSY	Janani Suraksha Yojana (Mother's Protection Scheme)
MCH	Maternal and Child Health
NFHS-3	National Family Health Survey (3rd round)
NGO	Non-government Organization
NSDP	Net State Domestic Product
NSSO	National Sample Survey Organization
OPD	Out-patient Department
OOPE	Out of Pocket Expenditure
PER	Public Expenditure Review
PHC	Primary Health Centre
PMGY	Prime Minister's Gramodaya Yojana (rural development scheme)
RCH	Reproductive and Child Health
RE	Revised Estimates
RH	Rural Hospital
RMP	Rural Medical Practitioners
SDH	Sub-divisional Hospital
SHG	Self Help Group
SGH	State General Hospital
SHSDP-II	State Health System Development Project: Phase Ii
STG	Standard Treatment Guideline

Preface

This document presents the key results of a recent research on health care system conducted by Institute of Health Management Research (IIHMR) in West Bengal, India based on a research grant awarded by the Department for International Development (DFID), United Kingdom to an International Research Programme Consortium (RPC) in which IIHMR is a partner. The consortium, titled as *Future Health Systems: Innovations for Equity (FHS)*, will carry out innovative research programmes in six countries. The three basic themes of FHS can be summarized as follows:

- How can the poor be protected from the impoverishing impact of health-related shocks?
- What innovations with public and private health sector can work for the poor?
- How can policy and research processes be used to meet the needs of the poor?

IIHMR has identified *West Bengal* as the major focus state for implementing the research programme in India. More specifically, it proposes to explore the potential of the strategy of decentralization of health care services, as manifested in a series of initiatives recently being spearheaded by the Department of Health and Family Welfare (DoHFW) in the state to improve the effectiveness of the health system, in protecting interests of poor people.

The guiding principle of the FHS research initiatives in India is "putting the poor first" supported by the three research themes mentioned earlier. Hence, the purpose of research is to generate evidences on the link between health, poverty, and consequent inequity from demand and supply angles and suggest appropriate interventions to weaken the link. Keeping this in mind, the research in India was planned as a multi-phases initiative. In the first phase, which just completed, a series of scoping studies were carried out to prepare a knowledge base on which an appropriate strategy for a more equitable health system would be developed. Phase II, would be devoted to develop a few major proposals, based on the Phase I research results. The proposals will approach specific interventions at the district level to help the system (1) track resources and benefits from government subsidies; and (2) protect the poor from health-related financial shocks.

The principle research questions for the Phase I studies were:

1. **How does the link between poverty and health manifest itself in the Indian health care market?**
2. **How much is the supply side environment oriented towards equitable distribution of resources?**
3. **Whether and to what extent the existing institutional arrangement at the ground level support implementation and oversight of pro-poor policies?**

The studies were carried out at two levels: (1) national and state level, primarily based on available national survey data (NSSO, RCH Household Survey, etc.); and (2) district level, exclusively based on primary (quantitative and qualitative) data. The primary data were sourced from three districts of **West Bengal** (the state selected for the Phase I studies) through rapid household survey, assessment of selected institutions (such as, health care providers, Panchayet institutions, health department, autonomous health societies, civil society bodies, and others), and assessment of a few pro-poor schemes (e.g., JSY, Rogi Kalyan Samiti, etc.) about whether and to what extent pro-poor policies are implemented.

The present monograph summarizes the key findings of Phase-I scoping studies which were conducted during January March, 2007. The purpose of disseminating these results is to initiate dialogue between key stakeholders on how to make the health care delivery system work more for the poor and vulnerable groups of population and protect them from the impoverishing effects of poor health and consequent health care. Although the data were sourced from a particular state (West Bengal), most of the findings are expected to be relevant to other Indian states.

Table of Contents

Executive Summary

India is on a fast-track growth path and the health care market is opening up with new opportunities. However, impressive growth with inadequate social protection may lead to newer vulnerabilities, inequalities, and health related poverty. The study focused on one Indian state (West Bengal) to explore the link between health, poverty, and equity against this dynamic backdrop. Primary data - from households and different types of providers - were collected from three districts of the state.

West Bengal is a middle level achiever in economic front but one of the top rankers (among all major Indian states) in most of the basic health indicators although the rural areas are significantly behind the urban. The state has a huge infrastructure of government's health facilities supplemented by an assortment of private health care providers, which play a minor role in preventive and inpatient care but a major role in ambulatory care. Despite an impressive growth of public spending on health over the last 15 years, the share of health in total budget has been declining. Inadequacy of public spending reflects in high out of pocket expenses on health which is about three times more than the former.

Health, Equity, and Poverty: Key issues

The major findings related to equity and poverty are classified into two groups according to their links to the following areas: (1) health care utilization, and (2) health care financing.

Health care utilization

- **Good performance in ensuring horizontal equity in inpatient care**: The state has made substantial progress in ensuring better access and equity in inpatient care. The rate of hospitalization has increased from 1.5% (of total population) in 1995-96 to 4.3% in 2007. The rate is almost uniformly spread across various socio-economic groups implying a near-perfect horizontal equity in inpatient care.

- **Young and older women have less access to hospitalization:** However, concern remains in gender inequity. The hospitalization rate was found to be much less for younger and older women than for their corresponding male counterparts.

- **Government hospitals play dominant role, but without much targeting:** The inpatient care market in West Bengal is overwhelmingly dominated by public sector an exceptional case since, nationally, private sector plays the major role. Public hospitals are, however, almost equally used by poor and rich indicating an uninhibited access to all and missing target mechanism.

- **Outpatient care market is dominated by unqualified providers:** The outpatient care market like other Indian states is dominated by private providers most of whom practice allopathy without adequate training (RMPs). The utilization of RMP services in rural areas is almost uniformly spread across various income groups implying that low cost treatment is not the prime factor to explain people's dependence on RMPs. The two most important factors, as found, were (1) the average distance to a RMP clinic that was much less than to a qualified provider; and (2) an attractive packaging of services by RMPs which includes easy availability, dispensing drugs often on credits, prompt response, and so on.

- **Strong barriers against equity in institutional delivery:** Perceived benefits (of institutional birth delivery) are low due to the common belief that birth delivery is a natural process and, hence, it requires no hospitalization. However, equally important are the barriers (or, cost) to access. Three important barriers are extremely relevant in this case: (1) long physical distance to the nearest facility, (2) higher out of pocket expenses to seek birth delivery care from an institution, and (3) poverty. That poverty or economic constraint plays an important determinant behind choice of place of delivery is evident from the data that 62 percent of all pregnant mothers in the poorest quintile but only 19 percent of them in the richest quintile delivered at home clearly implying that barriers get easier as one progresses from poorest to richest quintile.

- **Inequality in utilization of preventive child health care:** There is no significant difference in immunization rate across gender or rural / urban location, but inequality exists with respect to socio-economic groups. In other words, poverty is an important dimension to explain the inequity in preventive care. The scenario is much better in children's curative care where the probability of seeking treatment for a sick child is more or less same across gender, rural/urban, and socio-economic differential.

Health care financing

- **Equity in public spending is questionable:** During the last few years, the state has made remarkable progress in pumping additional resources for meeting non-salary and development needs. Yet the preliminary analysis indicates that there are scopes to improve allocative efficiency of public expenditure. Major share of public spending goes to urban areas. There are also inequalities in distribution of public budget across various types of hospitals; for example, the per bed allocation of fund to State General Hospitals is higher than that to District Hospitals. Demand creation and stewardship two vital functions of the public sector are allocated little fund. However, despite discrepancies in resource allocation, the state reflects a reasonably good pro-poor image of policy making on financing. This is quite evident in several policy decisions improvised during the last few years.

- **Poor oversight at the district level:** It is obvious that for a more effective oversight of public services the boundary of routine activities should be crossed. However, weak managerial and oversight *capacity* is one of the major constraints (at the district level) in this process. The state government has visibly embarked on several initiatives to arrange more flexible fund and autonomy to the district level. However, there is little evidence on effective utilization of this autonomy to protect poor from health related financial shock primarily due to (1) lack of an efficient resource-tracking mechanism, and (2) lack of interest and capacity among district health administration.

- **Medicines and test: killing fields:** The increase in government's budget on drugs has been significant especially in the last few years. However, still people spend a substantial amount on drugs even when they visit government facilities where drugs can be obtained free of cost. The possible reason for this is that about a half of poor and 70 percent of better-off public clients did not receive “some” or “any” drugs from the government facilities. Dominance of “some” (i.e., some but not all drugs were available) category offers several hypotheses about which drugs are not available in government facilities: (1) essential, but prescribed brands are not available, and (2) non-essential. The hypotheses can be tested only through proper auditing of

prescriptions. Another key finding is that a large portion of better-off patients (about 56%) also receives drugs from government facilities implying that a significant part of drug subsidy is absorbed by those who could possibly pay for it.

- **Out of pocket payment is progressive in inpatient care but not so in outpatient care:** In case of inpatient care, the impact of out of pocket payment is relatively more severe on higher income groups indicating a *progressive* out of pocket financing system. One out of five households from this group is likely to send at least one member to hospitals (for inpatient care) which will account for one-sixth of their annual household expenditure three times more than a normal scenario. The poorest households are likely to send fewer members, and spend proportionately much less. It is interesting to note that the impact somewhat reverses in case of outpatient care where poorer households spend more in relative terms. While about 4 percent of poorest households made catastrophic payments for inpatient care, more than 10 percent did so for outpatient care.

- **Growing health poverty in a socially unprotected environment:** A framework for analyzing health poverty is introduced which links vulnerability to health poverty with (i) household entitlements, (ii) supply side environment, and (iii) perceived opportunity cost of health care. Given that the social entitlement is very weak, all sections of population depend heavily on individual entitlements income, saving, borrowing, sell of assets, and so on - when they seek health care. Poorer section was found to depend more on extended entitlements (e.g., borrowing) implying that health care aggravates their poverty. Supply side environment was found to have no effective procedure for identifying poor and vulnerable. Opportunity cost of health care was high for example, 70 percent of households, which sent at least one member to a hospital as an inpatient, had to reduce their food consumption to pay for the hospital cost.

Towards a More Equitable Future: how can research help?

Develop a closer working relation with informal sector: The study recommends internalizing and using the huge pool of resources (i.e., RMPs) which is being used by the people anyway. Innovative ways to do so is to (1) empanel selected RMPs at each block as "Rural health gate keepers" based on several essential quality indicators. The role of the RMP will be to provide a set of basic curative services and refer cases immediately to formal providers as and when the patient crosses the identified "safe treatment"; (2) identify a set of basic curative and preventive services for which the RMPs will be given franchise right to operate as official gatekeepers; (3) involve civil societies (Panchayet or NGO) in implementing empanelment and mentoring the RMPs; and (4) provide intensive training to selected RMPs on simple treatments, identifying potentially complicated cases and "danger mark" where they have to refer. Future research in this area should address the following questions: (1) how "safe" or "unsafe" are the current clinical practices of RMPs? (2) What is the net impact of RMP practices on rural health? (3) How feasible is it to integrate RMPs into existing public health care system?

Ensure local oversight for implementing pro-poor strategies and resource tracking: Are the resources meant for poor actually reaching them? The answer may be found only when a mechanism for local oversight is established. The management unit under DHFWS may be strengthened to initiate resource tracking in the following areas: (1) delivery of drugs and consumables at government facilities, (2) disbursement of untied funds

for special medical assistance to the poor, (3) program funds flowing through the societies, (4) funds generated through user charges and retained at the district level, and (5) funds from special schemes, such as JSY or PMGY. Future research in this area may be initiated in the form of a pilot intervention by which the district management unit may be oriented and its capacity may be built to help it play oversight role.

Reduce asymmetric information in drugs market to empower the consumers: Protection of people from health poverty necessarily boils down to protecting them from irrational drug expenses. One of the important factors influencing the irrational process is high degree of asymmetry of information in the medicines market. Therefore, the ongoing supply side initiatives should be supplemented by demand side interventions based on the hypothesis that the out-of-pocket expenditure on medicines could be significantly reduced if the consumers are adequately empowered with information on (1) cheaper (but equally useful) and generic options of prescribed branded medicines; and (2) a distinction between essential and non-essential medicines in the context of a specific disease. The empowerment process could be implemented by involving the local level civil societies and local self-administration (e.g., *Panchayet*). The process could be initiated after a scoping study on the degree of asymmetric information in the market, and how the imperfect agents (i.e., providers and pharmacies) are using this information gap.

Develop appropriate risk pooling mechanism especially for economically disadvantaged section: A district based health fund is proposed which will be held by DHFWS and operated by a professional insurer. In addition to subsidy from the government and donors, the fund will be built on prepayment made by the Self-help Groups (SHG). Premiums will be determined by community-rated ability to pay. Providers will include selected and accredited private and government hospitals. Only secondary and tertiary government facilities should be included in the initial stage. Outpatient care should be included in the benefit package. A Technical Resource Centre will support the quality assurance mechanism and management of information system. Future research in this area should also be framed as a pilot intervention in one district.

Improve targeting in public subsidies for essential health care: Targeting poor could be done by equitable distribution of health care services through some sort of rationing by which the richer (including the government servants) will be able to access within the limit of a fixed quota of subsidized beds. This should be supplemented with a policy of total withdrawal of subsidy for those facilities that are accessed by the richer section (for example, private cabins) and recovery of the cost on 100 percent basis. A more gender-sensitized role of providers is expected to improve the gender inequity in inpatient care. Future research in this area is expected to focus on two aspects: (1) generating evidences on various targeting mechanisms and assess their feasibility in the context of the state's health care system, and (2) assessment of the pro-poor schemes initiated by the Department of Health and FW at the ground level where it works and where it does not.

Address the barriers to preventive care and safe birth delivery: The strong barriers to meet the goals of universal immunization and safe birth delivery need to be analyzed. For this purpose, the difficult pockets within the state and within the districts need to be mapped according to the nature of the barrier. Once the under-served areas are mapped and their barriers are identified, it is necessary to draw up a set of special strategies to cover these areas. Future research should meet the acute need for scientific information on what and how the barriers lead to underperformance. It should also help the decision-makers select a cost-effective option to act against those barriers and test it as a pilot intervention.

Facilitate and regulate private sector: Internalization of private sector necessarily implies that the private sector is to complement, and not just co-exist with, the public sector. The process would require three strategic steps: (a) Facilitate expansion of private market at those blocks or district headquarters where the government facilities are over-burdened; (b) minimum standards for its operation need to be maintained and regulated; and (c) involvement of private sector in district planning process is encouraged. Future research in this area is expected to provide the policy makers with crucial evidences on the operation of the market and help them design an effective policy for internalizing the private sector.

1. Background

1.1. Introduction

1.1.1. Indian economy, by all evidences, is on a fast-track growth path. Economic liberalization, triggered in early 1990s has taken a sharp upward turn with an impressive growth rate. However, despite India's strong growth performance which has unleashed enormous potential for economic advancement, there is growing concern that economic liberalization has been less successful in protecting people from the risk of new vulnerabilities, inequalities, and insecurities especially in the social sector. Health sector in India epitomizes this proposition. Two patterns are clearly visible: (1) there is a huge discrepancy in health outcome as well as in health care utilization between rich and poor and between richer and poorer states. Poor people have worse health, are less entitled to public subsidies, and are less protected against the financial shock generated by health care.; and (2) due to absence of an effective risk-pooling mechanism, rising demand for health care and galloping inflation in health care market, even not-so-poor groups of population are quickly slipping into poverty trap. In other words, India reflects a possible future scenario where the poverty-reducing impact of economic growth will be countered by poverty-enhancing effects of health care if the system continues to remain inequitable and people remain largely unprotected against financial risks related to health shock.

1.1.2. The recent government policies related to health and population implicitly acknowledges the need to address the question of inequities and vulnerabilities in a more effective way. The best instrument at the government's hand is its spending on health, which is targeted to increase to 2 percent of GDP by the year 2010 from its current level of 0.9 percent. This would require the states' budgetary allocation on health to rise to 8 percent from its current level of 5-6 percent and the center's contribution to rise from 15 percent to 25 percent (NHP, 2002).

1.1.3. Given the fiscal crisis currently being experienced by the state governments, the target may seem a bit ambitious. However, a more pertinent question is: will the increased public expenditure ensure better health for poor? Unfortunately, the present scenario fails to offer an unambiguous answer to the question. The primary reason behind this ambiguity is gross inequity in the distribution of public health resources. Inequity reflects not only in widening gap of public spending between poor and rich states (Purfield, 2005), but also in substantial absorption of public subsidies by the richer people within a given state. As shown by a recent study, about Rs. 3 is received by the richest quintile for every Re 1 of public health subsidy received by the poorest 20 percent (Peters et al., 2002). The disproportionate absorption of public subsidies reflects poor targeting in the public health care facilities.

1.1.4. Inadequate public expenditure, coupled with its poor targeting, results in uncontrolled proliferation of private providers and high out of pocket expenditure by the users of health care. Although government-provided health care is meant to be heavily subsidized and, as such, to benefit the poor, the majority of health care users who go to public facilities incur significant out-of-pocket costs. For example, a study in one of the Indian states (West Bengal) demonstrates that users of public sector facilities pay between 18 percent (for birth delivery) and 72 percent (for major ailments) of what users of qualified private sector facilities pay for similar services. About 75 percent and 87 percent of out-of-pocket expenditures in case of treatment of major ailments and minor ailments respectively in public facilities go towards medicine and diagnostic tests. Most of the users of public hospitals are compelled to purchase drugs and medicines in the private sector due to shortage of prescribed drugs in hospital pharmacy (Kanjilal and Pearson, 2002).

1.1.5. Weak targeting mechanism also reflects in heavy skewness in choice of providers. According to a recent national

survey, about 79 percent of Indians, who were suffering from minor illnesses, sought treatment from private providers (NSSO, 2004). It is also important to note that a large number of these providers were unqualified medical practitioners. Clearly, increasing public finance does not match with growing dominance of these unqualified providers in the health care market.

1.1.6. The above evidences clearly indicate two fundamental problems of Indian health care system: (1) resources flowing through the public administrative channels do not necessarily benefit the poor; and (2) even if it does, a common person in general - and a poor in particular - remains significantly unprotected against the unanticipated burden of treatment of ailments.

1.1.7. How can we make the health care system work more for the poor? How can the growing vulnerabilities be challenged with effective policy instruments? How can economic growth be made "inclusive" of health? These and many other questions need to be addressed to achieve what the Indian Planning Commission stated as their vision for the 11th Five-year plan …"It must seek to reduce disparities across regions and communities by ensuring access to basic physical infrastructure as well as health and education services to all". An important step towards this direction is to bridge in information gap and to generate relevant evidences that could be used as inputs for informed policy decisions. The present document attempts to do so and diagnose the challenges on the road towards an equitable future health system.

1.2. A Brief Profile of West Bengal[1]

1.2.1. West Bengal, located in the eastern part of India, ranks fourth among all Indian states in population covering less than 3 percent of the total area of India. It is strategically positioned with 3 international frontiers-Bangladesh, Nepal and Bhutan. Nationally, it borders the state of Bihar, Jharkhand, Orissa, Sikkim and Assam. Southern and eastern plains of the state are better endowed with sufficient water and huge productive land with a sub-humid climate. Extreme scarcity of water, adverse climatic conditions, poor quality of soil, and low productivity of land are the characteristic features of north, western and northwestern dry zone. The state is divided into 18 districts which are grouped into three administrative divisions.

1.2.2. According to 2001 census, the total population of the state is approximately 80.18 million. It covers 2.7 percent of the India's land area with 7.8 percent of the total population, thus making it the first ranker in terms of population density of 904 per square kms. The sex ratio in the state was 934 (females per thousand of males) in 2001 as compared to the national average of 933. The total fertility rate is lower (2.1) in comparison to the national average (2.4). Recent estimates show that the Crude Birth Rate (CBR) is 18.8 (2005) and Crude Death Rate is 6.4 (2005). The Crude Death Rate in urban areas (6.8) is less than that of rural areas (7.2).

1.2.3. The state's economy is rapidly progressing although it is still predominantly agrarian and 72 percent of its population lives in rural areas. However, agriculture contributes only about 27 percent to State Domestic Product (SDP). The service sector is the largest contributor to SDP which increased from 41 percent in 1991 to 51 percent in 2002. Between 1994 and 2004, the economy had grown at an average rate of 8 percent per annum and become the third largest economy in the country with a Net SDP of $ 21.5 billion. Per capita annual income was $395 in 2004, which

[1]This section draws heavily on *West Bengal Human Development Report (2004),* published by Development and Planning Department, Government of West Bengal.

Was higher than the national average. The current focus is on rapid industrialization through increasing private investment.

1.2.4. The state's record in poverty elimination and human development presents a mixed picture. The incidence of poverty in West Bengal in 1997-2001 was 27 percent of population below the poverty line, marginally higher than the national average of 26 percent. The performance of West Bengal in terms of household amenities is lower in comparison to national average. In the late 1990s, only 16 percent of rural households and 68 percent of the urban households had pucca (concrete) houses compared to 29 percent and 71 percent respectively for all over India. Half the households have toilet facilities whish is same as of India. In case of access to safe drinking water, 82 percent is getting safe drinking water vis-à-vis 62 percent all over India. Electrification has proceeded much slower in the state with only 33 percent having the access, compared to 42 percent all over India. In terms of Human Development Index (HDI), the state ranked 8th among 15 major states indicating an average performance.

1.3. Data and Methods

1.3.1. The study is largely based on primary data collected from three districts of West Bengal - Malda, Bankura, and North 24 Porgonas (Figure1.1) during November, 2006 through March, 2007. These districts are selected from three different socio-economic zones of the state. Malda district represents the northern part of the state, which is relatively backward in term of income, accessibility, literacy status, and other socio-economic indictors. North 24 Porgonas, on the other hand, is relatively more developed and urbanized and represents the east-central zone of the state which is also close to the capital city, Kolkata. Bankura district represents the western zone of the state which is historically backward with more than 10 percent of its populations as tribal.

1.3.2. Primary dataset includes data obtained through following four surveys parallely carried out in the above three districts:

- A households survey covering about 3150 households
- An exit interview of 690 out and inpatients in selected government facilities
- In-depth interview with 71 Rural Medical Practitioners (RMP) and their associations
- In-depth interview with 15 top-level medical officers at selected government hospitals to collect data on budget, expenditure, collection of user charges, and several other aspects of hospital operations.

Each of the above was executed with a set of structured questionnaire.

Figure 1.1. West Bengal Map and Study Districts

Household survey

1.3.3. For *household survey*, the households were selected by two-stage stratified sampling: first, from each of the selected districts, 35 primary sampling units (PSU) covering both rural and urban areas were selected through PPS (Probability Proportion to Size) method, and second, by selecting 30 households from each PSU through a systematic random process. In total, 3152 households were selected.

1.3.4. The household survey was conducted using a structured questionnaire which primarily focused on the health seeking behaviour, utilization of health care facilities, and out of pocket payments of the selected households. More specifically, the investigation focused on four types of ailing persons:

(1) those who were hospitalized (for inpatient care) in last 365 days;
(2) those who sought outpatient care in last 90 days, but not hospitalized;
(3) those who were suffering from chronic health problems on the day of the survey. Chronic problems were defined as (i) the person has been suffering from the problem persistently for at least 90 days, and (ii) the problem has been diagnosed by a qualified health professional
(4) those women who delivered births during last two years.

In addition to collecting quantitative data, several case studies and focused group discussions were conducted in each district.

Exit interview

1.3.5. For *exit interview*, 412 outpatients and 278 inpatients (total 690) were interviewed at selected government facilities including (a) District and sub-divisional hospitals (DH / SDH); and (b) Block Primary Health Centers (BPHCs). For outpatients, 10 percent of expected inflow of patients was randomly selected. For inpatients, the same percentage of sample was randomly drawn from the number of patients who were about to be released. Questions were usually answered by the attendants (relatives) whenever the patients themselves were unable to do so. The interview focused primarily on three aspects: (1) patients' background, (2) treatment seeking behavior, and (3) various costs of treatment.

Interview with RMPs

1.3.6. RMPs are not officially recognized; hence, there is no official source of information regarding the number of RMPs and location of their practice. It is, therefore, extremely difficult to apply standard sampling procedures for selecting a given number of respondents. Keeping this problem in mind, the following two unofficial sources were tapped to track a number of practitioners on 'as and when found' basis: (1) every district has at least one association of RMPs which keeps a list of their members. The association was contacted to locate possible respondents, and (2) information provided by the clients of government health facilities who were contacted through exit interviews. The focus of the interview was their background, background of their patients, treatment behaviour, earning, referral behaviour, and so on. In total, 71 RMPs were interviewed through this process. In addition, in-depth discussions with the RMPs' district associations were carried out in all the three districts.

Interview with government providers

1.3.7. A set of government facilities was visited by the FHS research team to understand the supply side environment regarding implementation of pro-poor strategies. The visit started from the office of Chief Medical and Health Officer (CMOH) of the district and also included: (1) District Hospitals, (2) selected Sub-divisional Hospitals, and (3) selected BPHC / PHC. In all cases, the facility-in-charge (i.e., the chief medical officer) was met and interviewed. The interview was guided by a checklist about information on collection and exemption of user fee, availability of drugs, existing mechanisms for targeting poor users, major problems faced by the providers, and so on. In total, 15 facilities of different levels were visited.

Secondary data

1.3.8. The analysis of primary data is supplemented by national level survey data, wherever necessary. Two major datasets were used: (1) National Sample Survey 60th round data on morbidity, health care and the condition of the aged (NSSO, 2004), and (2) RCH district level household survey (RCH-DLHS, 2004). In addition, the preliminary findings from the recently held National Family Health Survey (NFHS-3) were also used. NSSO and NFHS data were weighted while the other data (including the primary data) were un-weighted.

2. Health Sector in West Bengal
An Overview

2.1. Health Status in West Bengal

2.1.1. As is evident from Table 2.1, the status of health in West Bengal is better than that of the national average by almost all indicators. It is also to be noted that the state can now be grouped with few relatively better performing states in terms of its some vital statistics. For example, according to the Sample Registration System (SRS) data, the state has the fourth lowest birth rate after Kerala, Punjab, and Tamil Nadu; the lowest death rate (same as Kerala), and fourth lowest IMR after Kerala, Maharashtra, and Tamilnadu among the major Indian states. However, a few indicators also show less-than average status. Special concern is about prevalence of anemia among adult men and women, which seems to have higher prevalence in the state in comparison to the national average.

Table 2.1. Health outcomes: West Bengal and India

Indicator	Year	West Bengal			India
		Rural	Urban	Total	Total
Birth rate (per 1000 population)[a]	2005	21.2	12.6	18.8	23.8
Death rate (per 1000 population)[a]	2005	6.3	6.6	6.4	7.6
Infant Mortality Rate (per 1000 live births)[a]	2005	40	31	38	58
Neo-natal mortality rates (per 1000 live births)[a]	2003	33	16.0	30	27
% of U-5 deaths to total deaths[a]	2003	19.5	8.6	17	23.9
% of children aged 6-35 months with any anemia[b]	2005-06	71.9	58.2	69.4	79.2
% of children under age 3 under-weight[b]	2005-06	46.7	30.0	43.5	45.9
Total Fertility Rate (per 1000 women)[a]	2005-06	2.5	1.6	2.27	2.68
% of ever married men age 15-49 anemic[b]	2005-06	35.4	26.9	33.1	24.3
% of ever married women age 15-49 anemic[b]	2005-06	65.6	59.0	63.8	56.2
Maternal Mortality Ratio (per 100,000 live births)[a]	2001-03	NA	NA	194	301

Source: [a] *Sample Registration System*
[b] *National Family Health Survey (2005-06) (NFHS-3);*

2.1.2. Overall health outcomes are quite impressive in the state, but the gap between rural and urban areas (regarding health outcomes) is also evident (Table 2.1). The gap may be partially explained by the rural/urban inequalities in health service utilization. Although health care utilization in West Bengal is better than many other states, Table 2.2 shows that significant problems exist especially in rural areas. For example, only a half of the diarrhea-affected children were treated in rural in contrast to two-third of the same in urban areas. A little less than half of the pregnant women in rural areas received no antenatal care compared to only 13 percent of the urban women.

Table 2.2. Utilisation of selected health services in West Bengal

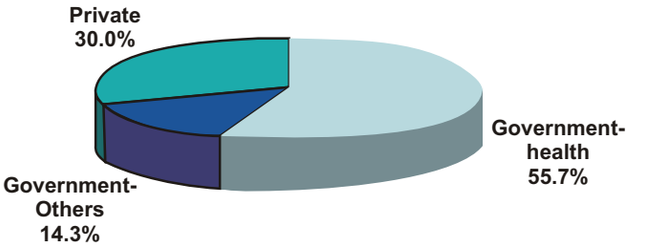
Health service indicator	Rural (Percent)	Urban (Percent)
Women who received Antenatal care	55.8	87.3
Deliveries in medical facilities	33.8	79.2
Women who received Postnatal care	29.9	67.4
Children received all vaccinations	62.8	70.3
Women who use any modern contraceptive method	49.9	49.9
Children with diarrhea treated in a health facility	50.0	67.6

Source: *National Family Health Survey (2005-06) West Bengal (NFHS-3), provisional data*

2.2. Health Care System in West Bengal

2.2.1. The state, like any other Indian state, presents an extremely complex landscape of health care service delivery. Public sector facilities in West Bengal range from 9 teaching (tertiary) hospitals with highly specialized physicians to more than 10,000 small sub-centers at the village level staffed by Multi-purpose Workers (MPWs). Within this range there exist various types of public facilities 15 district hospitals, 79 sub-district / state general hospitals (SDH / SGH), 93 Rural Hospitals (RH), 241 Block Primary Health Centers (BPHC), and 922 Primary Health Centers (PHC) - arranged in order of secondary to primary levels of care. Despite such an arrangement by levels, the tertiary and secondary hospitals often unnecessarily serve as first points of contact for preventive and basic curative services the product of a weak referral system. All these facilities are directly controlled and financed by the Department of health and family welfare which accounts for about 56 percent of total hospital beds, the rest being provided by "other" government departments (14%), and the private sector (30%) (Figure 2.1)[2].

Figure 2.1. Percent distribution of hospital beds



2.2.2. Services in the private sector, similarly, are delivered by a diverse group of service providers. This assortment includes about 1700 private (for-profit and not-for-profit) hospitals, modern private practitioners, qualified Indian System of Medicine (ISM) providers, traditional birth attendants, known as dais, and unqualified quacks. The share of this sector especially in outpatient care market is much higher than that of public sector, both in terms of utilization and out-of-pocket expenditure.

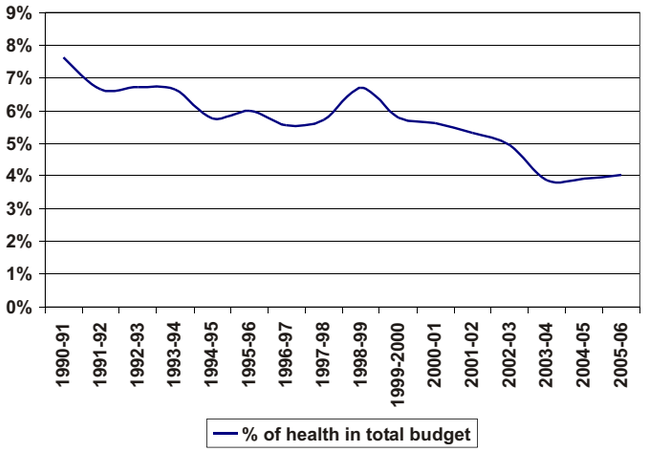
2.2.3. Adding to the complexity of the service delivery scenario is the dual role of the government health practitioner. Although there is hardly any documented evidence, it is commonly accepted that many government practitioners spend a significant portion of their time in private practice, thus blurring the line between public and private. Hence, an individual who reports that her source of care is the private sector, may in fact be frequenting the after-hours practice of a government doctor.

[2]Source: Health on the March (2005-06), SBHIDHS, Government of West Bengal, p-83

2.3. Public Financing of Health Care in West Bengal: An Overview

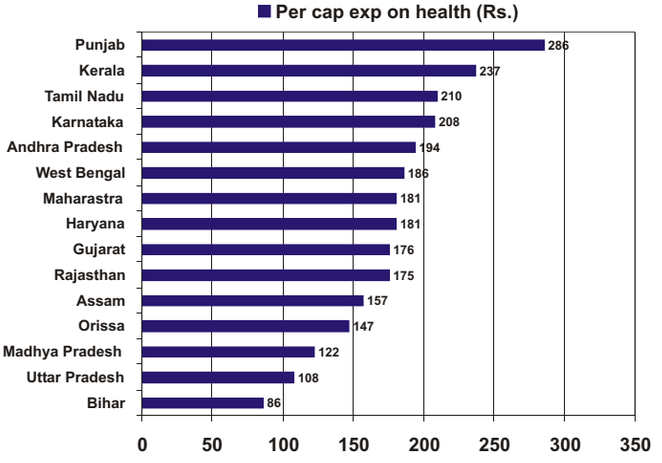
2.3.1. In 1990, the state spent about Rs. 4600 million on health which has more than quadrupled over the next 15 years. Notwithstanding this impressive hike in investment on health, relative share of health in total budget, however, declined over the same period. The decline has its root in growing fiscal barriers which almost all Indian states have been subjected to. The increasing fiscal pressure on the state is quite evident in the fact that the contribution of Revenue Deficit in Gross Fiscal Deficit is higher in West Bengal than anywhere else in the country (RBI, 2006). High and increasing level of Revenue Deficit indicates a growing burden of non-plan expenditure in a constrained revenue-generating environment.

Figure 2.2. Percentage of government health spend to total budget (1990-2005)



2.3.2. However, despite declining share of public health expenditure, the government of West Bengal is one of the top spenders on health on a per capita basis (Figure 2.3). The per capita expenditure on health was Rs. 186 (a little less than $5) in 2002-03.

Figure 2.3. Per capita government expenditure on health, 2003-03 (in Rs.)



2.3.3. The budget in each department is received and used on four major accounts: (1) non-plan[3], (2) plan[4], (3) Centrally Sponsored Scheme (CSS)[5], and (4) capital account. Among them, non-plan expenditure remains the major source of public spending on health in all Indian states. As expected, the lion's share of this expenditure goes to meet the salary and wage bill of the staff leaving very meager resources with the state to spend on development or non-salary recurrent expenses. Given the labor-intensity of public health care in

[3]Non-plan budget is the part of state budget that is spent for continuation of the programs, which were initiated in the previous plan and considered as committed liabilities of the state. The recurrent part of the plan budget of an activity is usually transferred to the non-plan budget in the next plan period. The assistance to fill the *non-plan* resource gap of the State is determined by the Finance Commission appointed by the Central Government.

[4]Plan budget is the part of state budget that covers all expenditures, both capital and recurrent, incurred on programs and schemes that have initiated by the state during the current five-year plan. The size of the total planned expenditure is determined through a negotiation of the state with the Planning Commission, a non-statutory permanent body appointed by the Central Government.

[5]Centrally Sponsored Schemes (CSS) is the central plan grants that directly finance some selected programs, such as Family Welfare program. Except Family Welfare program, the central grant under this scheme finances only the plan component of the CSS program.

India, the scenario is unlikely to change unless some strategic initiatives are taken to mobilize additional resources for development.

2.3.4. The present scenario in West Bengal reflects this strategic move additional resources for planned (or, development) expenditure as well as for non-salary items (such as, drugs) are pumped into the system to jack up non-salary expenses. Consequently, the share of non-plan expenditure in total outlay reduced to about 71 percent in the recentbudget (2007-08) from 77 percent in 2000-01. This has been possible due to two most important steps: (1) mobilizing internal resources under State Plan; and (2) external supports (such as, budgetary support by DFID and the World Bank).

2.3.5. The districts are the basic implementation units of the state's health care programmes. The district health authority is the ultimate outlet for using the central and state funds. The funds flow on two routes (1) through the district health authority directly from the state's health department which primarily covers salary, maintenance and drugs, and constitutes the major share of total fund flow; and (2) through an autonomous body, called District Health and Family Welfare Samity (DHFWS) which primarily covers direct expenses of various vertical and centrally sponsored schemes and constitutes less than 20% of total fund flow (excluding in-kind flows).

2.3.6. DHFWS is an extremely significant intervention to improvise decentralization in financing and decision-making at the district level. It was formed in 2003 to establish a parallel channel of fund inflow to the districts especially in the context of centrally sponsored public health programmes. Traditionally, the central funds for each of these programmes used to flow through individual societies, such as District TB Society, District Leprosy Society, and so on. These societies were autonomous and funds flowing through them were kept in separate accounts outside the jurisdiction of public treasury. The individual societies were merged in 2003 to form DHFWS and brought under the common administration of district health system. The underlying principal of fund flow to the society, however, remained the same, i.e., the funds are primarily "additional" to the routine non-plan expenditure of the districts (salary, drugs, administration cost, etc.) and are to be used exclusively on specific programme activities.

2.3.7 The state has a cost-recovery mechanism in terms of users charges levied on different services at higher-level hospitals (i.e., tertiary hospitals, district hospitals, and sub-district hospitals). Traditionally, the revenues collected through this process used to be deposited to state's treasury. However, in most recent times two radical steps have been taken to ensure autonomy at the service delivery point: (1) formation of an autonomous society (Rogi Kalyan Samiti, or RKS)) at all tiers of facilities (from PHCs to teaching hospitals); and (2) facilities, where user fees are charged (e.g., sub-divisional, district, and teaching hospitals), would be able to retain a pert of the generated revenue and the remaining part will go to DHFWS. Impacts of these recent interventions are yet to be assessed, but existing evidences point out that user fee could hardly recover a significant portion of the cost. For example, a study in 2004-05 [Public Expenditure Review (2005)] on three sub-divisional hospitals (SDH) and three district hospitals (DH) showed that the SDHs could recover only 1.56 percent of their total and 8.65 percent of their non-salary expenditure. The corresponding figures for DH are 2.9 percent and 20.9 percent respectively.

2.4. Private Health Care Spending

2.4.1. There is now substantial evidence that, despite massive investment by the state governments on health care and heavy subsidy flowing to primary care, the users of services are still spending a huge amount either directly or indirectly to

avail the services. For example, according to the estimates of a recent national survey (NSSO, 2004), an inpatient from rural West Bengal spends Rs. 4582 approximately 16 percent of their annual household expenditure - on hospitalization (corresponding national average is Rs. 6225).

2.4.2. The household survey carried out for FHS research (in three districts of West Bengal) reconfirms the phenomenon of high out-of-pocket expenses (see Section 1.3 for methodology). Out of pocket expenses (OOPE) include expenses on all medical expenses (such as, consultation, drugs, IPD charges, diagnostic tests, etc.) and relevant non-medical expenses (for example, travel, board and lodging, etc.). Table 2.3 presents the mean OOP estimates for each of the following categories of health care: (1) hospitalization; (2) outpatient; (3) chronic; and (4) birth delivery for all districts taken together.

Table 2.3. Estimated annual out of pocket payments for different categories of health care, 3 districts in West Bengal (in Rs.)

Rural

	In Rs.			
	Per household	**Per affected household**	**Per user**	**Per capita**
Hospitalization	777	4331	3809	157
Outpatient	1092	1170	497	221
Chronic	1280	2633	1895	259
Birth delivery	99	592	392	20
Total	**3248**	**8726**	**6593**	**657**

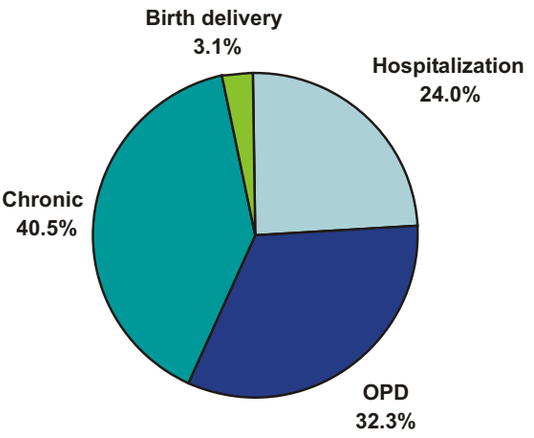
Urban

	In Rs.			
	Per household	**Per affected household**	**Per user**	**Per capita**
Hospitalization	932	5141	4540	210
Outpatient	1102	1232	569	248
Chronic	1685	3023	2160	379
Birth delivery	133	1117	1117	30
Total	**3852**	**10513**	**8386**	**867**

2.4.3. The estimated annual *per capita* (i.e., based on total population) OOPE for overall health care works out to Rs. 657 in rural, Rs. 867 in urban areas, and Rs. 703 for overall. Based on the estimated per capita public spending on health in 2007-08 (Rs. 210), this accounts for about 77 percent of total government and households taken together expenditure on health. On average, a rural *household* spends Rs. 3248 annually on curative health care and birth delivery which works out to about 11 percent of its annual total consumption expenditure (the corresponding figures for urban areas are Rs. 3852 and 8%).

2.4.4. How much does an average household spend on each of the four categories? Figure 2.4 presents the distribution of share of each of them in total medical care expenditure incurred by an average *household* (rural and urban taken together). Hospitalization appears to absorb about a quarter of a household's medical care expenditure whilst the expenditure on care for (acute) outpatients and chronic patients accounts for about 73 percent of the same. The difference between impacts of inpatient and outpatient care is quite evident; the financial impact of hospitalization, which may be disastrous to an affected household (i.e., the household from where at least one member was hospitalized) gets substantially weakened when it is averaged across all households (since it affects only about 4% of population). In comparison, the impact of outpatient care is much less on affected households but more on the whole society since it affects almost all households.

Figure 2.4. Percentage distribution of OOPE, by health care categories, 3 districts, West Bengal



2.4.5. The results presented in Table 2.3 do not indicate a significant rural / urban differential with respect to per user OOPE in case of inpatient, outpatient, and chronic care. For example, an urban resident, when hospitalized, would spend 1.2 times more in comparison to his / her rural counterpart. The implication is that, on average, rural and urban residents utilize the same level of medical care when they are hospitalized. The rural-urban differential is more prominent in case of birth deliveries because a large number of rural women opt for a very cheap option of home delivery.

3. Health, Equity and Poverty
Key Issues

3.1. Key issues

The analysis below highlights the following issues that policymakers can address to improve equity in financing, provision, and use of health care services in West Bengal. These issues are broadly classified into two groups: (1) health care utilization; and (2) health care financing. The issues are:

I. Health care utilization

- Good performance in ensuring horizontal equity in inpatient care
- Young and older women have less access to hospitalization
- Government hospitals play dominant role, but without much targeting
- Outpatient care market is dominated by unqualified providers
- Strong barriers against equity in institutional delivery
- Inequality in utilization of preventive child health care

II. Health care financing

- Equity in public spending is questionable
- Poor oversight at the district level
- Medicines and test: killing fields
- Out of pocket payment is progressive in inpatient care but not so in outpatient care
- Growing health poverty in a socially unprotected environment

I. Health Care utilization

3.2. Good performance in ensuring horizontal equity in inpatient care

3.2.1. The NSSO 60th round survey in 2004 (NSSO, 2004) estimated total number of hospitalized cases (or, hospital admissions) in India in a year to be about 2.60 percent of total rural and 3.48 percent of total urban population (Table 3.1). The corresponding estimates for West Bengal (NSSO-2004) are 2.48 percent and 3.94 percent. It is notable that the estimated rates in 2004 were significantly higher than those in 1995-96 in India as well as in West Bengal (NSSO-52nd round survey).

3.2.2. The last column of Table 3.1 presents the most recent estimates on hospitalization in West Bengal, generated from the FHS survey in three districts. The estimates are higher than NSSO estimates but closer to the estimates of the Department of Health & FW, Government of West Bengal[6]. It is noteworthy that, overall, the hospitalization rates have increased in the last 10 years across all socio-economic groups. The rising trend of hospitalization may be partially explained by the state's persistent efforts to improve the accessibility to hospitals for admissions especially through State Health System Development Project (SHSDP) implemented in late 1990s through early 2000s.

[6]Officially, about 2.6 million cases (i.e., admissions) approximately 3.13% of the state population - were registered in public hospitals (excluding Block PHCs) in 2005 (estimated from the official website of the Department of Health & FW, Government of West Bengal- www.wbhealth.gov.in). Adding private hospitals' share and adjusting for average number of admissions per hospitalized person, the most likely estimate would be between 4.0- 4.2%.

The project focused on strengthening the secondary care hospitals all across the state through a sizeable investment on infrastructure. It is, however, to be noted that urban hospitalization rate is higher than that of rural rate, possibly due to easier access to hospitals and more choices an urban resident usually enjoys.

Table 3.1. Rate of hospitalized cases (% of population) in India and West Bengal

Rural

	India		West Bengal		
	NSSO (1995-96)	**NSSO (2004)**	**NSSO (1995-96)**	**NSSO (2004)**	**IHMR (2007)**
Poorest	0.5	1.49	0.4	2.03	3.59
Next 20%	0.9	1.99	0.9	2.30	4.80
Next 20%	1.5	2.41	1.4	2.25	3.65
Next 20%	2.1	3.18	1.5	2.81	3.78
Richest	3.7	4.80	2.7	3.22	5.01
All	1.4	2.60	1.2	2.48	4.13
CI	**0.37**	**0.23**	**0.30**	**0.08**	**0.035**

Urban

	India		West Bengal		
	NSSO (1995-96)	**NSSO (2004)**	**NSSO (1995-96)**	**NSSO (2004)**	**IHMR (2007)**
Poorest	1.3	2.67	1.6	3.55	4.68
Next 20%	1.7	3.49	1.7	3.66	4.48
Next 20%	2.0	3.68	2.2	4.32	4.04
Next 20%	2.7	3.85	2.5	3.67	5.39
Richest	3.8	4.26	3.9	4.71	4.57
All	2.1	3.48	2.3	3.94	4.62
CI	**0.22**	**0.08**	**0.18**	**0.05**	**0.012**
Total hospitalization rate (%)	**1.7**	**2.82**	**1.5**	**2.83**	**4.23**

3.2.3. How equitable is the hospitalization rate? Does a poor have equal chance to be hospitalized in comparison to a rich person when they have equal need for hospitalization? The answer is given in terms of *concentration index* (CI) presented in the last row of Table 3.1 (see Box 3.1 for a brief note on CI) and representing the degree of inequity in the rates. It is evident that CI has been sharply progressing towards 0 a state of horizontal equity in West Bengal over the last ten years (from 0.3 and 0.18 in 1995-96 to 0.035 and 0.01 in 2007, respectively for rural and urban residents) while the national figure still indicates a significant pro-rich bias especially for rural cases. In other words, a poor and a rich person have almost equal access to inpatient care in West Bengal it is neither pro-rich nor pro-poor - while, nationally, the better-offs tend to use more inpatient care.

Box 3.1. Concentration Index (CI)

Concentration index *(CI)* is a standard tool universally used by the economists to measure the degree of inequality in various health system indicators, such as health outcome, health care utilization, and health care financing [Wagstaff, Van Doorslare, and Paci (1989)]. Its value ranges from -1 to +1. A negative value of CI implies that the relevant health variable is concentrated among the poor or disadvantaged people while the opposite is true for its positive values. For example, if the health indicator were Infant Mortality Rate (IMR), a negative CI would imply that mortality rate is higher among the poorer infants; if it is immunization and CI is positive, richer children are proportionately more immunized than their poorer counterparts are. When there is no inequality, CI will be equal to zero. Typically, a zero CI implies a state of horizontal equity which is defined as *equal treatment for equal needs.*

In Table 3.1, rate of hospitalization is the relevant health related indicator. A positive CI means that persons from the richest group get more hospitalized compared to the poorer groups. A pro-poor strategy for inpatient care should reduce the CI towards a negative value.

The CI values in Table 3.1 were computed by the following three steps (for details, visit

www.worldbank.org/poverty/health/wbact/health_eq.htm or contact author).

Step 1

First, the population were ranked according to their monthly per capita consumption expenditure (MPCE); second, the ranked population were grouped in five ascending quintiles (population in quintile 1 is the poorest and the same in quintile 5 is the richest); and third, number of hospitalized cases for each quintile was computed by multiplying number of hospitalized persons in each quintile in a year with how many times they were hospitalized.

Step 2

First, the cumulative percentage of sample population (from quintile 1 through 5) was calculated this is denoted as p_t $(t=1,...,5)$. Second, the cumulative percentage of estimated cases (from quintile 1 through 5) was calculated this is denoted as L_t $(t = 1,...,5)$.

Step 3

Finally, the concentration index is computed by applying the following formula:

$$CI = (p_1 L_2 - p_2 L_1) + (p_2 L_3 - p_3 L_2) + \ldots\ldots + (p_4 L_5 - p_5 L_4)$$

The standard errors of the estimated CI were also computed following the methodology given in the above reference.

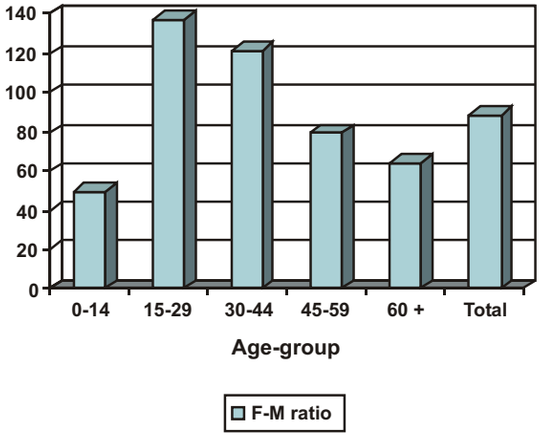
3.3. Young and older women have less access to hospitalization

3.3.1. Notwithstanding a progress towards more equity in overall hospitalization, one may ask question on gender equity. For assessing gender perspective in hospitalization, female-male ratio was computed by the following way. First, female cases per 100 female population and male cases per 100 male population were estimated for each of five broad age-groups, and second, female rate was divided by male rate and multiplied by 100 to estimate Female-Male (F-M) ratio. Assuming that need for hospitalization is more or less same between a man and a woman (excluding hospitalization due to birth deliveries), gender equity is achieved when the ratio is equal or close to 100.

3.3.2. Figure 3.1 presents the F-M ratio for all age groups. It is quite evident that a young girl or an older woman is less likely to be hospitalized in comparison to their male counterparts. Interestingly and contrarily, the bias against male is quite prominent in the middle age groups where F-M ratio is significantly greater than 100. Overall, the ratio works out to be 88 indicating slight bias against females.

3.3.3. Bias against female hospitalization may be explained by the barriers a woman usually faces when she accesses medical care. These barriers are often prohibitively high especially for inpatient care - treatment is expensive, inpatient facilities are far away, staying away from home is unaffordable, and so on. Add to this the usually low perceived severity and high degree of neglect for women's health problem which are not related to childbearing. The bias against men in their middle age may be partially attributed to their bread-earners' role which often prohibits them from spending days in hospital.

Figure 3.1. Female-male ratio in hospitalization (3 districts, West Bengal)



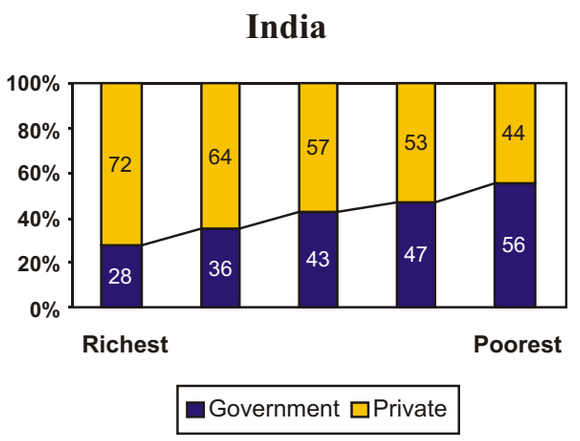
3.4. Government hospitals play dominant role, but without much targeting

3.4.1 West Bengal is one of the very few states where most people use government hospitals for inpatient care. While private sector has been expanding its share in the inpatient care market at the national level - from 40 percent of all hospitalized cases in 1986-87 to about 60 percent in 2004 by NSSO estimates West Bengal remains more like an exception. According to FHS household survey in three districts, only 18 percent of all hospitalized cases sought treatment in private hospitals.

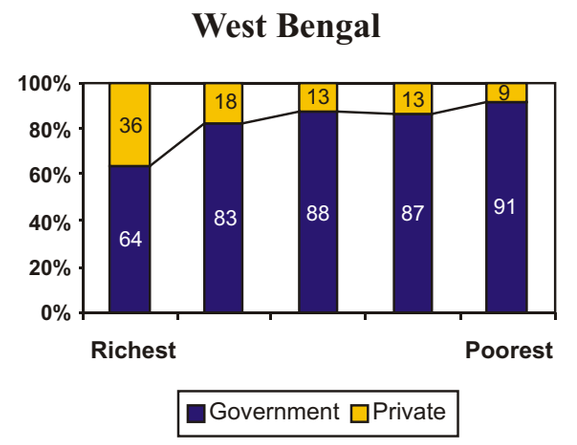
3.4.2. Absolute dependence of people on government hospitals in the state may be explained by weak presence of private hospitals in all districts barring a few pockets. A pertinent question is: does this overwhelming presence of government (in inpatient care) reflect a better pro-poor strategy? The concern for equity forms a key element in government interventions in health. It is now well accepted that public provision and funding of health care should primarily target those who, irrespective of their health status, cannot afford to buy health care or pay the insurance premiums. In other words, in a resource-scarce environment, the public sector should subsidize the neediest segments of a population. Consumers who are able to pay for services will do so in the private sector where it exists.

3.4.3. The right panel of Figure 3.2 presents the relative share of government hospitals in West Bengal. For comparison, the relevant NSSO estimates for India are also presented in the left panel. As expected, almost all of the poorest inpatients (91%) in West Bengal sought admission in government hospitals, but the data also reveals that about two-third of patients in the richest group had chosen government hospitals for inpatient care implying that public subsidies also benefit a large section of high-income population who may not need subsidies.

Figure 3.2. Share of government and private hospitals in total hospitalized cases, by socio-economic groups



Source: NSSO (2004)



Source: IIHMR (2007)

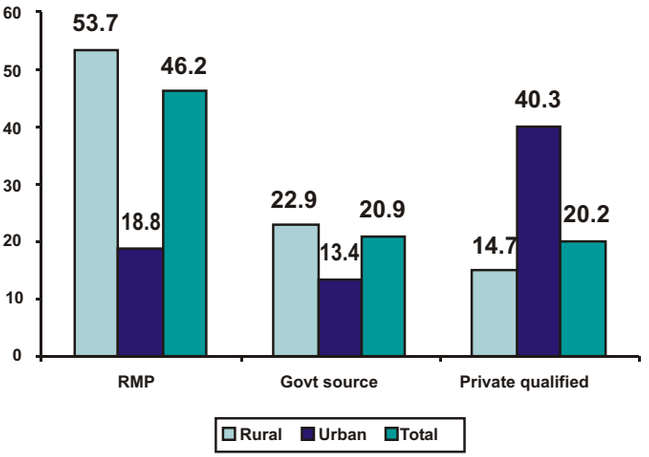
3.4.4. The evidences in Figure 3.2 indicate a near-perfect horizontal equity in utilization of government hospitals (i.e., equal treatment for equal needs irrespective of socio-economic differential) in West Bengal whilst the Indian scenario presents a clear and more desirable pro-poor bias. However, one can also argue that it is neither desirable nor feasible to prohibit richer section from using government hospitals especially when (1) private hospitals are inadequately available in most of the districts; and (2) apparently the high utilization by the poorest section remains unaffected implying that poor's interest is still well-protected even if they are not targeted. The argument, which is apparently sound, may fall flat if there is any "crowding out" effect in the public facilities especially in the case of hospitalizations and birth delivery. In other words, a relevant question would be: is there substantial number of poor patients who could not get admissions in public hospitals because subsidized beds are already occupied by the better-off patients? Or, alternatively, did some poorest women have to deliver babies at home because those, who were occupying free beds despite their higher ability to pay, crowded them out? The anecdotal evidences seem to support this hypothesis, but, no hard evidence has been produced by the studies carried out so far.

3.5. Outpatient care market is dominated by unqualified providers

3.5.1. Despite a strong infrastructural base of the public health care facilities in many Indian states, the majority of outpatient services, especially in the rural areas, are provided by private health care providers, most of whom practice modern allopathy without any formal training. This section of medical practitioners is often identified as Rural Medical Practitioners (RMPs), "unqualified", "less than fully qualified (LTFQ)" providers, or simply "quacks". West Bengal is no exception, where, according to the National Family Health Survey (NFHS-II) conducted in 1995-96, about 60 percent of the households visited the private medical sector for outpatient care when they fell sick. Although NFHS-II did not classify "private doctors" according to their qualification status, researchers and policy makers alike concur that a large section of them belongs to "RMP" category.

3.5.2. The evidences collected through FHS research reconfirm dominance of RMPs in outpatient care market especially in the rural areas of three study districts. As Figure 3.3 shows, about 46 percent of outpatient clients sought treatment from RMPs while government sources were visited by 21 percent. However, the estimate regarding utilization of government facilities (21%) seem a bit underestimated when one compares it with supply side information (see Box 3.2).

Figure 3.3. Percent distribution of persons seeking outpatient care, by major sources of care (3 districts, West Bengal)



3.5.3. The FHS research focused on those RMPs who practiced modern allopathic treatment without being formally trained to do so. The set includes those (1) who practice without any formal training on any stream (allopathy, homeopathy, ayurvedic, etc.); (2) who graduated in medicine from any unrecognized organization; and (3) who graduated in a non-allopathy stream but practicing allopathy. Household survey apart, data were collected from two other sources: (1) exit interviews of selected outpatients and inpatients in selected government health facilities in three study districts, and (2) in-depth interviews with 71 RMPs. In each case, the interview was conducted by using a structured questionnaire.

Box 3.2. A quick calculation of the share of government facilities in total outpatient visits, 2005

According to government source (see www.wbhealth.gov.in) total number of outpatient visits was about 43 million in the year 2005. A quick back-of-the-envelope computation will be as follows:

(i) Total outpatient visits in a year = 43 million (approx).

(ii) Average annual number of outpatient visits by a person = 1.77 (from FHS survey)

(iii) Hence, total number of OPD visits (including all sources) in the state = Total population × 1.77 = 150 million (approx.) assuming total state population=8.5 million

(iv) Share of government facilities in OPD care = 43 million 150 million = 28.7%

3.5.4. Table 3.2 presents data on households' health care seeking behaviour in case of outpatient care. The table is based on the detailed information on those household members who *actually* suffered from any type of ailment and sought outpatient care in the last 90 days preceding the survey.

3.5.5. The strong presence of RMPs is quite evident in Table 3.2. Among the 5284 rural and 1450 urban patients, who sought treatment for their minor health problems from various sources, about 54 and 19 percents respectively, were treated by RMPs.

Table 3.2. Percentage of affected persons actually sought treatment from RMPs, by per capita expenditure quintiles, 3 districts, West Bengal

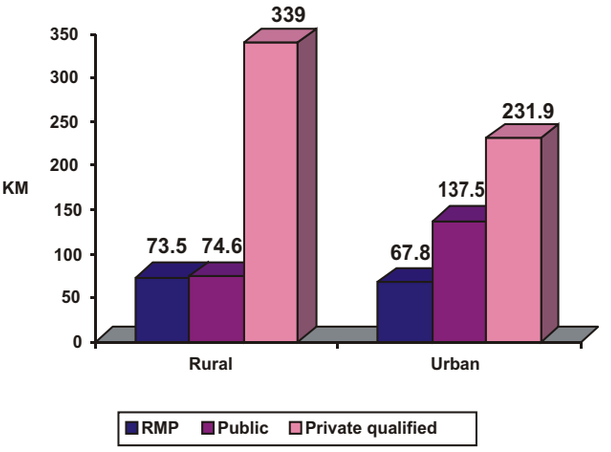
	Rural		Urban	
	No. of persons treated	% of them treated by RMPs	No. of persons treated	% of them treated by RMPs
Poorest quintile	1,056	53.69	295	33.90
Next 20%	1,083	52.26	309	26.86
Next 20%	1,075	53.67	296	15.20
Next 20%	1,079	59.50	284	10.92
Least poor quintile	991	48.94	266	4.89
Total	5,284	53.69	1,450	18.76

3.5.6. There is a common perception that treatment by RMPs is much cheaper than other alternatives; hence, only poor clients visit them. The evidence, however, stands against this perception, especially in rural areas. As shown in Table 3.2, the utilization of RMP services in rural areas is almost uniformly spread across various socio-economic groups. Equal distribution (with respect to socio-economic status) in utilization of RMP services in rural areas implies that it is not only lighter economic burden, but also some other factors, which direct the rural people to RMPs. This is also evident from Figure 3.4 where the average out-of-pocket payments for treating minor ailments are presented.

3.5.7. Figure 3.4 reveals that visit to a government facility in the rural area for non-hospitalized treatment would cost as much as it will to a RMP (about Rs. 75) although the same can not be said about an urban government facility where it costs almost double. The question is: why do rural people across all categories prefer RMPs to public health care centres if both are equally cheap (or, expensive)?

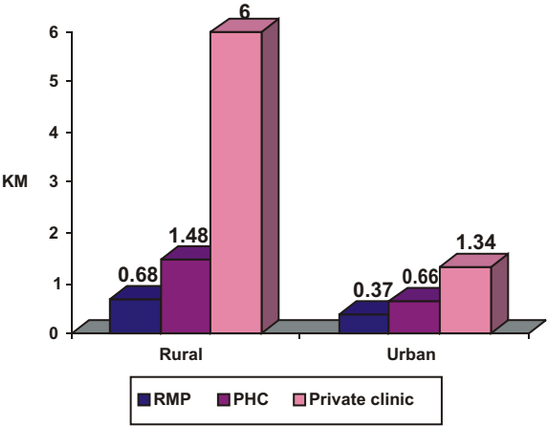
3.5.8. The study attempted to identify possible answers to the above question from the household survey. The three most important reasons for choosing RMPs (as identified by the percentage of respondents) are: (1) close location (74%); (2) always available (65%), and (3) cheap (61%). The other two reasons, not as important as the above three, are: (4) availability of medicines (27%), and (5) scope to pay later or by installments (25%).

Figure 3.4. Average out-of-pocket payments for treatment of minor ailments, by sources of treatment (in Rs.)



3.5.9. That proximity is one of the most important factors for the spread of RMPs is also evident from Figure 3.5 where the average distances of various sources of care from the respondents' residences are plotted. On average, a rural resident has to travel less than a kilometre (0.68 km) to visit a RMP; the distance becomes double (1.48 km) if it is a public health centre and about ten times more (6 km) if it is a clinic of a private qualified doctor.

Figure 3.5. Average distance to sources of treatment for outpatient care, (in Kilometers)



3.5.10. Physical accessibility, however, explains the demand side only partially. A public facility, even if it is closely located to a village, may be bypassed due to non-availability of a regular doctor. All medicines prescribed by a PHC doctor may not be available within the facility. Consequently, the patients have to remain prepared to pay upfront for the medicines they would purchase from private pharmacies. Moreover, the prescribed medicines, which are purchased from pharmacies, may not always be of the cheapest brand. RMPs feed on the above weaknesses of the public health care system. They are usually always available, closely located, and sell medicines as a part of their service often on credit. Clearly, their operations manifest the simple economic phenomenon that a market, when it fails to deliver, begets a parallel but efficient alternative.

3.5.11. The in-depth survey of 71 RMPs and their associations in the three districts identified the following characteristics of the RMPs:

- Most of them (58%) were non-graduates.
- On an average, a RMP treated about 600 cases per month. About 14% of the users were children (below 5 years)
- More than half of them (56%) acquired some sort of "degree" from unrecognized private institutions.
- On an average, an RMP earned around Rs. 3250 per month.

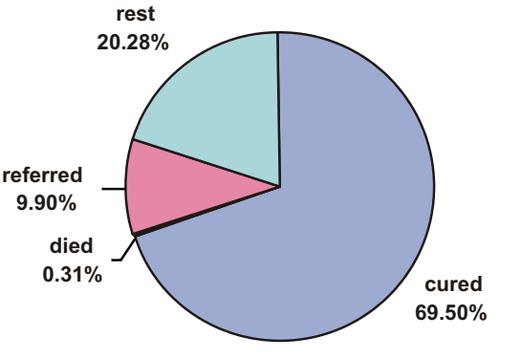
3.5.12. The RMPs usually provided services for minor ailment although a minor fraction (6%) also provided preventive care (immunization). A majority of them (72%) also did minor surgeries. About one-third of them assisted in birth deliveries. Almost all of them (90%) responded to house calls. Dispensing drugs with treatment is one of the key attractive services provided by RMPs. About 90 percent of the sample RMPs were found to follow this practice. A majority of them (70%) procured drugs from the local chemist shop. The other source was wholesale market from where one-fifth of them procured drugs.

3.5.13. The most common diseases treated by the RMPs were: diarrhea / gastro-enteric disorders (97%) and common cold / cough / fever (83%). The typical procedure for treating a child with diarrhoea was to put him / her on saline and give him / her anti-diarrhea medicine.

3.5.14. Do RMPs refer potentially or actual complicated cases to public facilities or qualified private doctors? The common perception is that they do it only when cases go completely out of their control. Data collected from the selected RMPs partially confirm the perception. An RMP would hardly refer a case of common diseases such as diarrhea or fever, irrespective of its potential complications or chronic nature. This is quite evident from Figure 3.6 where the sample RMPs' responses (about the status of children after they were treated by them in the last three months) are presented.

3.5.15. Despite the response bias (since data were collected from the RMPs), it is worth noting that only about 10 percent (1668 out of 16842 children) of the children were referred to formal providers. The children under "rest" category were not cured; however, due to data limitations it can only be assumed, but not confirmed, that most of them switched over to formal providers or to another RMP.

Figure 3.6. Distribution of children treated by the sample RMPs in the last 3 months, by status after treatment (total 16842 children)



3.5.16. Do RMPs act as a bunch of thorns in the existing health care system, or do they act as a good balancing factor in maintaining rural health? The study stops short of drawing any conclusion on this issue due to its limited scope, but available evidences highlight a few points:

(i) Irrespective of health outcome, RMPs have established a strong network of health care, especially in rural West Bengal, primarily due to easy accessibility and attractive low-cost packaging. Since there is no effective barrier to entry into the market, the market share of these providers is likely to increase in future.

(ii) However, without any effective regulatory mechanism, the quality of care provided by RMPs remains completely uncontrolled. Consequently, the risk of doing harm is significant, especially in cases where careful diagnosis or surgical operation is required (see Box 3.3). The risk is further aggravated particularly because many people do not even know that RMPs are not "real" doctors.

3.5.17. The household survey informed that more than 80 percent of hospitalized persons sought admission to government hospitals (see Figure 3.2). However, a different picture emerges when one looks at the pre-admission phase of the hospitalized persons. About 60 percent of rural hospitalized persons had initiated their treatment with RMPs. They carried on pre-hospitalization treatment for an average of 33 days and spent Rs. 1400 on average. In other words, there is a strong indication that a large section of rural patients hang on with the RMPs before they get hospitalized probably with more complications developed. The implication of this finding is that the burden of disease and cost of treatment would be substantially reduced for a large number of hospitalized persons if their pre-hospitalization spell with RMPs could be minimized.

3.5.18. Notwithstanding the risks involved in the spread of RMPs, their positive contributions to rural health can hardly be exaggerated. This is especially true where the alternative to RMPs' service is "no treatment" (see Box 3.4).

Box 3.3 A narrow escape

Akhil Pal, a rag-picker, visited Kaliachak BPHC (Malda district) with a swelling on his head. The doctor at the BPHC diagnosed it as a tumor and advised immediate surgery. Scared of operation and yet unable to bear the increasing pain, Akhil went to a local RMP, who is known to be a multi-therapist, practicing so many "pathies" simultaneously and healing multifold ailments. He guaranteed Akhil of a prompt cure, administered several injections around the tumor, and started operating upon the protruded part. Half-way in the process, and after the unkindest cut, he coolly informed that the operation may eventually end up in cancer, and called it quits. A frightened Akhil, still bleeding profusely from 'operated head' was taken again to the BPHC.

Source: FHS survey, 2007

Box 3.4 An alternative to "no care"

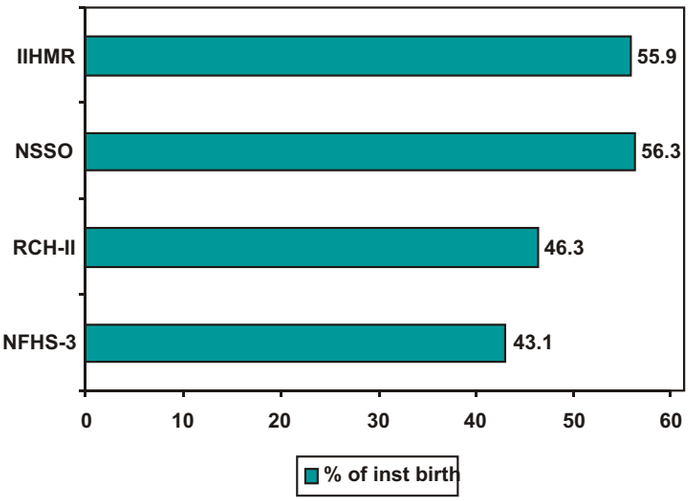
Sumitra Mondal, a resident of Borosheyana village, was admitted to Taki Rural Hospital (N 24 Porgona) for birth delivery. Sumitra complained of severe abdominal pain and discomfort, but was not attended to by the hospital staff, who dismissed her complaints rendering it to be 'normal' in case of delivery patients. With increasing pain and still being unattended, Sumitra was taken back towards home. Back in her village she was attended to by a local RMP at his dispensary, who administered injections and medicines to ease her pain considerably. In the next few hours, the RMP assisted Sumitra to have a normal delivery.

Source: FHS survey, 2007

3.6. Strong barriers against equity in institutional birth delivery

3.6.1. There are at least four estimates available on the current status of institutional delivery in the state (Figure 3.7). According to the recent National Family Health Survey (NFHS-3), about 43 percent of total births in West Bengal are delivered at government and private institutions (33.8% in rural and 79.2% in urban areas). Another household survey conducted for RCH program (RCH-II DLHS, 2004) also generated similar estimates (46%). The NSSO survey (6oth round) conducted in 2004, on the other hand, came up with a much higher estimate (56.3%). Finally, the estimates derived from IIHMR's FHS survey in 2007 are almost the same as NSSO estimates (55.9%).

Figure 3.7. Percentage of institutional birth deliveries in total births, by different data sources



3.6.2. Notwithstanding variation in estimates, increasing institutional delivery is one of the top priorities to the policy makers of the state although NFHS estimates show only a little progress in this case the rate of institutional delivery just increased by 3 percent points in the last ten years, from 40.1 percent in 1995-96 (NFHS-2) to 43.1 percent in 2005-06 (NFHS-3). The question, subject to validity of NFHS estimates, is: why progress in this area is so slow compared to that in other areas?

3.6.3. Conceptually, the answer remains in perceived benefits and various barriers to access an institution for birth delivery. Perceived benefits (of institutional birth delivery) are low due to the common belief that birth delivery is a natural process and, hence, it requires no hospitalization. However, equally important are the barriers (or, cost) to access. Three important barriers are extremely relevant in this case: (1) long physical distance to the nearest facility, (2) higher out of pocket expenses to seek birth delivery care from an institution, and (3) poverty.

3.6.4. Table 3.3 shows that the above three barriers indeed play important roles in this context. For example, women, who delivered birth at government hospitals, had to travel 14 km on average to reach the facility whilst women who delivered at home *would have to* travel 24 km had they decided to deliver at any institution. In other words, there is apparently a negative correlation between distance and institutional delivery. Similarly, there is a strong ground for hypothesizing that higher out of pocket expenses for institutional delivery force many women to deliver births at home for example, OOPE for home delivery (Rs. 343) was only 40 percent of the same for delivery at a government hospital (Rs. 848).

3.6.5. That poverty or economic constraint plays an important determinant behind choice of place of delivery is also evident from the data that 62 percent of all in the poorest quintile but only 19 percent of all in the richest quintile delivered at home clearly implying that barriers get easier as one progresses from poorest to richest quintile. The above evidence points out to a glaring dichotomy: while the state has reached a desired level of equity in general inpatient care,

maternity inpatient care remains significantly inequitable. Two plausible explanations for such discrepancy are: (1) a cheaper option (i.e., home delivery) is available in the latter case while non-maternity inpatient care has no alternative except accepting death or disability; (2) the perceived risk (or, opportunity cost) of not seeking institutional care is much less in case of maternity cases.

Table 3.3. Birth delivery and associated information, by place of delivery (3 districts of West Bengal)

For those who delivered at	% of total delivery	Average distance to the nearest facility (km)	Per user OOPE (Rs.) – normal delivery	% of women in poorest quintile delivering birth at	% of women in richest quintile delivering birth at
Institutions	***55.9***	***14.3***	***1158***	***38.4***	***80.7***
in which					
Government hospitals	47.4	13.9	848	35.7	56.8
Private hospitals	8.5	20..2	4233	2.7	.23.9
Home	***44.1***	***23.8***	***343***	***61.6***	***19.3***

3.6.6. It is also important to note how the targeting principle is totally blurred in case of institutionally delivery. As expected, almost all women in the poorest quintile who delivered away home used public facilities (35.7%, while total institutional delivery was 38.4%); but the data also reveals that 70 percent of women in top quintile, who delivered away home, had chosen public facilities (56.8%, while total institutional delivery was 80.7%) despite the fact that they could probably afford to pay private market price.

3.6.7. Table 3.3 presents a descriptive picture of the possible barriers to institutional delivery. It is also important to know their relationship in a more precise term. More specifically, a broader question should be addressed: what factors do facilitate or impede institutional delivery? Who are more likely to seek institutional care for birth delivery? The likelihood can be statistically estimated by odds ratio in a multivariate framework (see Box 3.5).

Box 3.5. Who is more likely to seek institutional care for birth delivery?

Odds ratio is commonly used in binary outcome models (i.e., where the dependent variable is coded as 1 or 0) to answer a question as asked above. It estimates the *odd* of occurring an event for a particular group in comparison to another group (or, reference group). The ratio ranges from 0 to infinity.

Table 3.4 presents odds ratios with respect to a set of independent variables estimated through a logistic regression model where dependent variable is institutional birth delivery in three districts of West Bengal (institutional delivery = 1, non-institutional delivery=0). All independent variables (except Distance and Age) are grouped with at least one group kept as a reference variable.

The results may be interpreted in the following way: the odds ratios for Malda and Bankura are 0.46 and 2.76 respectively implying that a woman in Malda district is much less likely and a woman from Bankura is much more (2.76 times) likely to seek institutional care in comparison to their counterparts in N. 24 Porgonas. Similarly, a woman from a top income group (Richest quintile) has odds 2.39:1 in her favor in comparison to a woman in the poorest quintile clearly indicating a sharp inequity in institutional delivery.

Table 3.4. Estimated Odds ratios for institutional delivery in 3 districts of West Bengal

Variables	*Reference variable*	*Odds ratio*
District		
Malda	N.24 Porgonas	0.46*
Bankura	N.24 Porgonas	2.76*
Economic status		
Poorest quintile (quin **tile1)**	Quintiles 2 – 4	0.47*
Richest quintile (quintile5)	Quintiles 2 – 4	2.39*
Social category		
Hindu	Non-Hindu	3.02*
SC/ST	Non- SC/ST	0.54*
Residence		
Urban	Rural	2.75*
Accessibility		
Distance		0.66*
Individual factors		
Age		0.98
Up-to primary education	More than primary	0.57*
N = 492		

p<0.05

The results also show how distance acts as a barrier. The odds ratio for distance is much less than 1 indicating that, all other things remaining the same, an increase in distance would adversely affect the odd or likelihood of seeking institutional care. As expected, women with no or little education also are less likely to seek institutional care in comparison to educated women. However, age of a woman does not have statistically significant link to the probability of choosing the place of delivery.

3.7. Inequality in utilization of preventive child health care

3.7.1. Preventive health care for the children is still an area where some degree of inequity exists. Table 3.4 shows that there is no significant difference in immunization rate across gender or rural / urban location, but inequality exists with respect to socio-economic groups (concentration index is close to 0.1). In other words, poverty is an important dimension to explain the inequity in preventive care. The scenario is much better in curative care where the probability of seeking treatment for a sick child is more or less same across gender, rural/urban, and socio-economic differential (concentration index is close to 0 for male and <0 for female).

Table 3.4. Percent distribution of fully immunized and diarrhea-treated children, by rural / urban, sex, and socio-economic groups, West Bengal

Rural

	% of fully immunized children		% of diarrhea-affected children treated	
Asset quintiles	*Male*	*Female*	*Male*	*Female*
Poorest	31.75	33.11	68.52	79.41
Next 20%	34.18	32.81	66.67	82.35
Next 20%	34.80	36.25	80.95	70.59
Next 20%	41.27	39.71	70.97	52.94
Richest	51.85	53.23	69.23	76.47
CI	**0.098**	**0.097**	**0.006**	**-0.04**

Urban

	% of fully immunized children		% of diarrhea-affected children treated	
Asset quintiles	*Male*	*Female*	*Male*	*Female*
Poorest	35.57	31.61	100	66.67
Next 20%	40.61	39.35	60.00	62.50
Next 20%	50.81	54.70	66.67	66.67
Next 20%	53.40	54.87	66.67	75.00
Richest	58.12	57.43	100	33.33
CI	**0.097**	**0.112**	**0.007**	**-0.07**

Source: RCH-II DLHS, 2004

3.7.2. The link between poverty and lower rate of immunization may have various roots. Achievement in immunization is directly linked to the strength and effectiveness of outreach services. Barriers to these services include (1) adverse geographical location, (2) absenteeism and / or inadequacy of grassroots workers, (3) low perceived needs, and so on. It is a common experience that these barriers are more prohibitive for economically disadvantaged people especially in rural areas.

3.7.3. West Bengal has demonstrated an impressive record of progress in immunization coverage. For example, by NFHS estimates, the percentage of fully immunized children in the state has reached about 64 percent in 2005-06 (NFHS-3) from a mere 34 percent in 1990-91 (NFHS-1), compared to the national progress from 36 percent to 44 percent during the same period. About three-fourth of all children in the state received measles vaccine in 2005-06 compared to 42 percent in 1990-91 (the corresponding national figures are: 59% and 42%). Despite such progress, the concern remains among the state's key decision-makers whether and to what extent the barriers (see 3.7.2) act against

achieving the goal of universal immunization. It is expected that the FHS research programme would provide adequate evidences on this issue through its Phase-2 research to help the government draw up an appropriate strategy for universal immunization. This would be done through (1) mapping un-served and under-served areas; (2) identifying the major underlying barriers (geographical, or administrative, or other factors); and (3) outlining a concrete strategy on how to improve the coverage in those areas.

II. Health Care Financing

3.8. Equity in public spending is questionable[7]

3.8.1. Apart from out of pocket payments, public finance is the only other major source of health financing in India. The question is: are public subsidies equitably distributed? An attempt was made to distinguish between spending aimed at rural and urban areas in West Bengal. The figures probably underestimate the share going to rural areas as it assumes that teaching facilities spending is in urban areas (it is - but some benefits rural areas) and that hospitals only serve urban populations (which is nor necessarily true). Based on these simplified assumptions the findings suggest that rural population (which is a majority) receive about 40 percent of public budget. The distribution of drugs is considerably biased towards urban population (80 percent against 20 percent going to rural).

Table 3.5. Percentage allocation of government budget by location and use (2005-06), West Bengal

	Salaries and Wages	Office Expenses	Maintenance	Drug	Diet	Other	Total
Rural (%)	43.9	42.1	36.4	20.1	30.5	42.0	41.3
Urban (%)	54.7	57.0	63.5	79.8	69.5	57.2	57.6
National (%)	1.4	0.9	0.1	0.1	0.0	0.8	1.1
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Budget Estimates 2005/6 Demand for Grants No 24

3.8.2. The ways in which resources are used can be described in a number of other ways. Table 3.6 below shows how the key programmes relate to the main functions of the Department of Health and FW stewardship (the oversight role) the provision of intermediate goods (such as training medical staff) and the actual delivery of goods as well as efforts to increase the demand for services.

Table 3.6. Programmes according to functions

Stewardship	Provision of Intermediate Inputs	Delivery of Services	Demand Creation
Government Administration Direction and Administration (Central/M&PH/FW) Direction and Administration (District) Grants to Councils/Regulatory Bodies e.g. Pharmacy Council Health Statistics and Evaluation Regulation Food Adulteration Drug Control Public Health Laboratories	Medical/Other Training Support for Medical Colleges Grants to other training institutions FW training Transport Production of Vaccine and Sera	Health Facilities Teaching Hospitals Hospitals and Dispensaries Grants to NGOs Special Programmes for the Poor Other Hospitals Medical Stores Dept Primary Services PHCs/Dispensaries U&R FW Services MCH Other Systems of Medicine Tribal/SC Compensation (demand side financing) Health Education - School Health/Public Education	Health Education

[7]This section draws heavily on Public Expenditure Review (2005).

3.8.3. Table 3.7 suggests that over 80 percent of resources are used to provide services with very little explicitly focused on demand creation which needs to be considered in the light of low levels of utilization in many primary care facilities. It also suggests that spending on the provision of inputs is less salary intensive than other forms of support. It also shows that the 2005-06 budget estimates propose an increase in the share of resources being devoted to the production of inputs at the expense of service delivery.

Table 3.7. Percentage allocation of Resources by Function, West Bengal

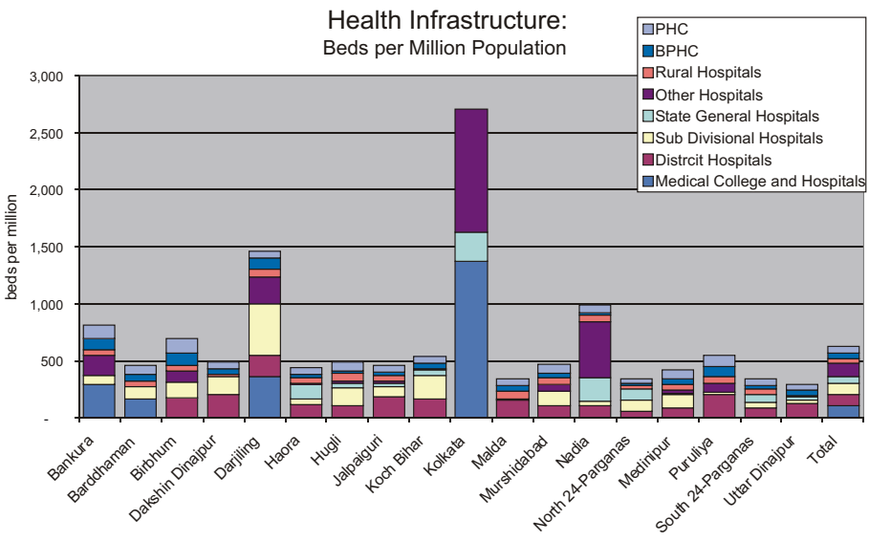
	2003/4 Actuals	2004/5 RE	2005/6 BE
Service Delivery	85.0	83.4	82.0
Intermed Inputs	9.3	10.6	12.6
Stewardship	5.6	5.9	5.3
Demand Creation	0.1	0.1	0.1

Source: Public Expenditure Review (2005)

3.8.4 Other distinctions can be made in terms of whether the provider of services is in the public sector or whether there is contracting with the private sector (e.g. NGOs). It will be important to track this in light of the new policy on public private partnership to assess whether significant amounts of resources are being transferred to private providers. At present although Government provides grant to a large number of non-government bodies and institutions together (excluding Panchayet) such flows only account for around 1% of total spending.

3.8.5. How the public funds are geographically allocated? Figure 3.8 reveals no significant inequality in this area except in three districts (Kolkata, Nadia and Darjeeling). However, it is also evident that more backward districts especially in the northern parts of the state (Malda, North and South Dinajpur) reflect a comparatively lower bed-population ratio.

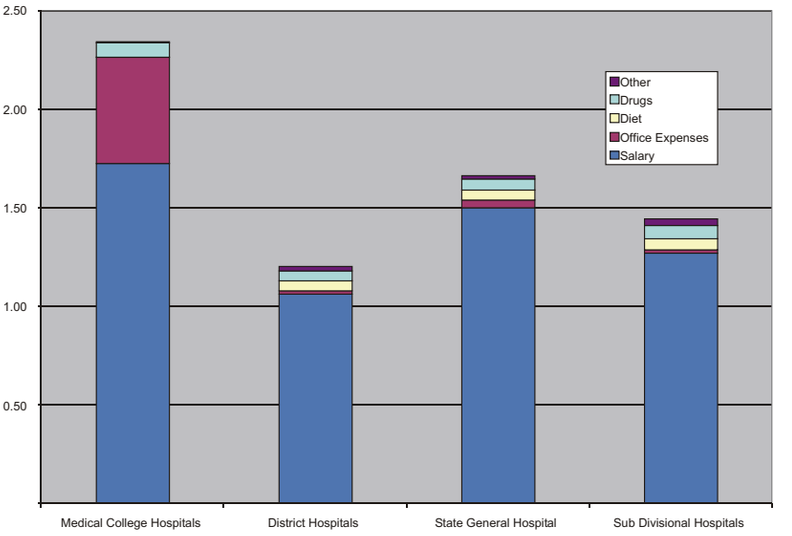
Figure 3.8. Beds per million population, by districts and by types of government facilities, West Bengal



3.8.6. Figure 3.9 shows estimated expenditure for selected hospital facilities. Here, by looking at the key budget lines it would appear that district hospitals are relatively underfinanced compared to other types of hospitals. A rather surprising finding is that state general hospitals seem to receive significantly higher allocations on a per bed basis than district hospitals whose allocations are comparable with those of much smaller sub divisional hospitals. Moreover, there are significant differences

between estimated expenditures within these categories. This would warrant further investigation. Further analysis shows that not only is there a significant difference in terms of allocations to different types of facility but that are also significant differences in allocations between similar types of facility. The fact that the official bed complement does not reflect actual practice (i.e., there exists discrepancy between actual and sanctioned number of beds) may account for part of this but there are still wide variations which are unexplained.

Figure 3.9. Estimated expenditure per bed, by use and types of facility



3.8.7. Despite discrepancies in resource allocation, the state reflects a reasonably good pro-poor image of policymaking. This is quite evident in several policy decisions improvised during the last few years. This includes: (1) strengthening of secondary care facilities all across the state; (2) increasing drug supply; (3) delegating more autonomy to he districts; (4) allocating untied funds for medical assistance to the poorest; (5) involving local self-administration (Panchayet) in local decision-making process; and so on. The policies also got momentum due to recently launched Health System Development Initiative (HSDI) program. The question is: whether and how these policies are implemented at the district level and below.

3.9. Poor oversight at the district level

3.9.1. Is there any mechanism at the district level by which a poor or a vulnerable could be identified and protected from impoverishing effect of health care? Apparently, the health functionaries do not have a clear mandate on this issue. The underlying principal of using funds is to channelize them by line items leaving little scope to improvise local solutions for protection of poor and vulnerable. The only way a poor receives special attention is his /her exemption from paying user charges at the hospital. Due to a blurred exemption policy and in absence of a proper identification mechanism, this policy is often abused to an extent where a government hospital exempts more than 90 percent of its clients from paying user charges (IIHMR, 2004). Further, the exemption policy does not protect poor from spending on medicines and diagnostic tests due to their non-availability at the facility level (see Section 3.10).

3.9.2. Obviously, a pro-poor strategy requires an effective oversight mechanism at the local level that could track the linkages between received funds and the consequent performance of a district in achieving equity goals. Three important prerequisites for such local oversight are: (1) flexibility in utilizing the funds, (2) an efficient resource-tracking mechanism, and (3) interest and capacity of local health managers to link performance with budget.

3.9.3. Let us first consider the flexibility issue. It is true that most of the expenditures under non-plan category are committed (e.g., salary expenses). Also, funds flowing from the central government on various vertical programmes are usually tied not only to a specific programme, but also to its specific line items. Yet it is notable that the state

government has recently embarked on a series of innovative initiatives to arrange some additional funds for the districts which could be used on the top of routine expenses. Important among them are revenue generated from user charges at hospitals, special medical assistance for poorest patients, increased drug budget, and several other untied or semi-tied funds. The funds flowing through these routes are small in comparison to routine funds, but large enough to activate a special financing mechanism for poor and vulnerable.

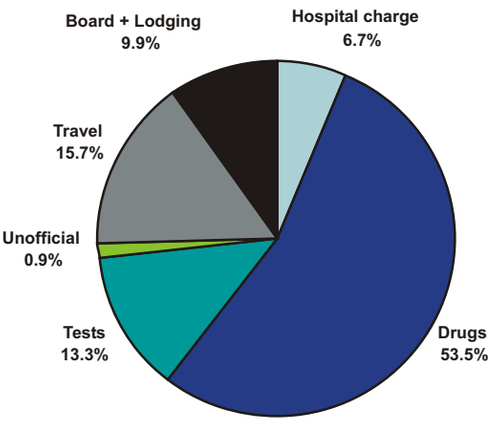
3.9.4. Is there any efficient way to track down the use of these top-of-the-routine resources? Evidently, no. One reason for this is the system's complete dependence on and comfort with the existing accounting system which is based on the principle that money spent (or, disbursed) is equal to money used. Consequently, it becomes difficult to assess whether and to what extent additional drug budget is actually reducing the burden of a poor patient, how the money generated through user charges are ploughed back to the system, and so on.

3.9.5. The issues related to interest and capacity are complex. Usually there is a general aversion of district health officials to financial figures, which creates problem in monitoring the efficiency in funds utilization. Also, interestingly, some of them avoid or delay in taking decisions regarding flexible funds on various pretexts. For example, discussion with one of the district offices revealed that not even 1 percent of the medical assistance fund could be spent in a particular year. A detailed study would provide a clearer and confirmed picture, but in-depth discussions with the health officials suggest that addressing inequity through available flexible resources is not in their top priority list.

3.9.6. It is obvious that for a more effective oversight of public services the boundary of routine activities should be crossed. However, weak managerial and oversight capacity is one of the major constraints (at the district level) in this process. It is encouraging to see that the state has started addressing this problem. A management unit has been established at each district and a new set of young and skilled non-medical manpower (statistician, accountants, management graduates, etc.) have been fed into the unit. The potential created by this process needs to be translated and directed towards an effective oversight role (see Section 4.3 for details).

3.9.7. The District and block level Societies (Samitis) could play an important role in oversight activities (see Section 2.3) although their primary task is to pull together all programme related funds and transmit it downstream according to allotments. However, it also could play a stewardship role by which it could (1) be able to re-allocate the resources among the programmes on the basis of specific programme-specific needs or district plan; (2) ask for financing accountability for the funds spent from each programme manager and assess whether poor are being benefited; and (3) be able to generate additional resources at the local level. The current situation reflects poorly on each of these aspects.

Figure 3.10. Out of pocket expenses for inpatient care in government hospitals (3 districts of West Bengal)



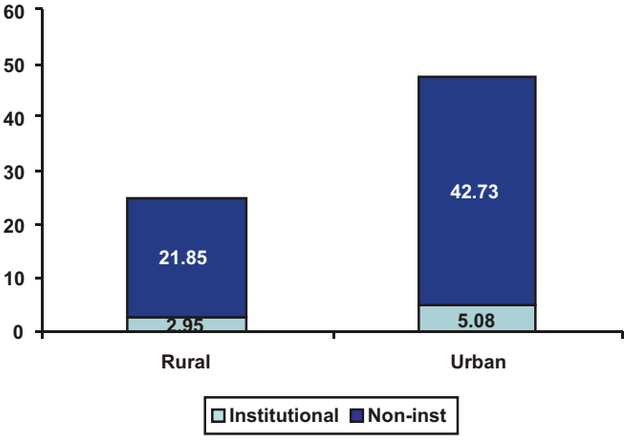
3.10. Medicines and tests: killing fields

3.10.1. The FHS survey reveals that about two-third of out of pocket payments in case of inpatient care in government hospitals are spent on medicines and diagnostic tests (Figure 3.10). On an average an indoor patient in government hospital would spend

Rs. 1428 on these two items while a private client pays about 1.5 times more than that. Since the government facilities do not charge for the medicines, the above evidence implies that a large section of the users of government hospitals are compelled to purchase medicines from private pharmacies. Therefore, although public sector users pay for services, these payments accrue largely to the private sector for medicines and unaccounted ancillary costs. These "revenues" do not enter the public health system and, hence, cannot be used to improve the services that clients receive.

3.10.2. Expenditure on medicine in inpatient care is however just a small fraction of what people spend on outpatient care. According to the recent NSSO results on consumption expenditure (NSSO(2), 2004), per capita monthly out of pocket expenses in non-institutional (i.e., outpatient) care is about 10 times and 8 times more than institutional (i.e., inpatient) care respectively in rural and urban areas (Figure 3.11). Not surprisingly, medicines in outpatient care accounts for more than 80 percent of total out of pocket payments

Figure 3.11. Per capita monthly OOPE on medicines in institutional and non-institutional care (in Rs.)



3.10.3. Medicines and tests are, therefore, the principal agents for economic drain in households affected by health shocks. It is, therefore, expected that the government would commit more attention and resources towards this direction. The scenario prevailing in the last few years reflects that the government has indeed embarked on a commendable initiative to rationalize drug use. This includes (1) developing an Essential Drug List (EDL) and a Standard Treatment Guideline (STG); (2) initiating a process of computerizing the drug procurement and management systems; (3) imparting training in basic store management principle; and last, significantly increasing the budget on drugs. At the same time, the principle of providing the patients with drugs at no cost (if available) would remain unchanged.

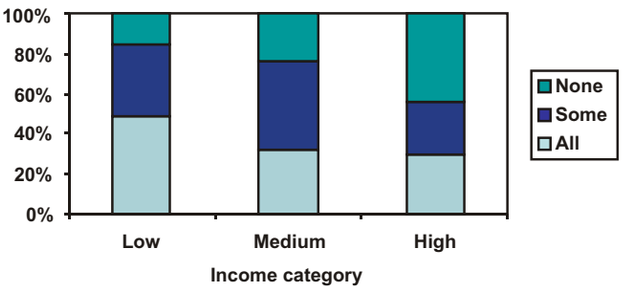
3.10.4. The increase in budget on drugs is significant especially in the last few years. From a mere 5.5 percent in 1998-99 it has increased to about 8 percent of non-plan expenditure. According to the providers visited by FHS research team, the drug supply situation has considerably changed in recent years. There are more varieties of drugs now, compared to the pre-2000 scenario. About 77 percent and 68 percent of hospital respondents (i.e., providers) felt that the drug supply was regular and adequate. In general, discussions with hospital officials reflected a scenario where despite its own deficiencies, the present drug supply status is much better than that in five years ago.

3.10.5. In an ideal situation, according to government policy, all clients of all government facilities will obtain drugs from the facility (free of cost). As expected, the reality is way apart from the ideal situation. The results from exit interview of 412 outpatients in government facilities shows that about 22 percent of outpatients of government hospitals did not receive any of the prescribed drugs from the hospital pharmacy. It is, however, also to be noted that the poorer patients are less likely to return with no drug compared to better-off patients. Figure 3.12 shows that probability of getting no

drugs directly varies with the economic status of the patients[8] - 44 percent of high-income patients and 16 percent of low-income patients received no drugs, indicating a clear pro-rich tilt in the distribution of those who probably had to buy, or opted to buy all prescribed drugs from private pharmacies. Alternatively, as the data reveals, poorer patients are less deprived from receiving government's drug subsidy.

Figure 3.12. Percentage of outpatients in government facilities who received all, some, and no drugs from the government pharmacies, by income categories.

[Exit interview, 412 respondents, 3 districts]



3.10.6. Notwithstanding the impressive equitable distribution of drugs, the fact remains that people spend a significant amount on drugs even when they use services of government hospitals. The possible reason for this is that about a half of poor and 70 percent of better-off patients did not receive "some" or "any" drugs from the government facilities (see Figure 3.12). The "some" category is crucial since it covers 40 percent of all patients. One way to figure out the proportion of expenses on this "some" drugs is to compare the average expense of those who purchased "all" drugs from private pharmacies with the same of those who purchased the "remaining" drugs. The average expenses, as estimated from the exit interview data, work out to Rs. 156.8 and Rs. 87.35 respectively implying that about 55 percent (87.35 156.8) of the values of total prescribed drugs are paid by the users who had to buy "some" drugs from outside.

3.10.7. We can summarize the relevant issues in the following way:

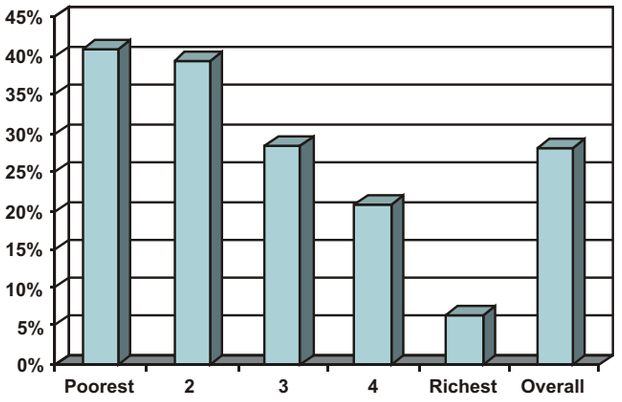
- Most of the poorer outpatients (about 85%) in government facilities receive either "all" or "some" drugs free of cost from the facility.
- However, a large portion of better-off patients (about 56%) also receive this benefit implying that a significant part of drug subsidy is absorbed by those who could possibly pay for it .
- Dominance of "some" (i.e., some but not all drugs were available) category offers several hypotheses about which drugs are not available in government facilities: (1) essential, but prescribed brands are not available, and (2) non-essential. The hypotheses can be tested only through proper auditing of prescriptions.
- There is hardly any monitoring in prescribing behavior; in the absence of monitoring, the prescribing behavior is often determined by the physicians' subjective assessment of patients' spending capacity (i.e., more expensive drugs are prescribed if the patient is assessed able to pay).
- The drug flow to the hospitals is primarily supply-driven; no objective analysis is done to assess the hospital-specific needs (which, in turn, would require assessment of local epidemiology).

[8] The economic status was determined on the basis of reported annual household income: (1) low income less than Rs. 20,000; (2) medium more than Rs. 20,000 but less than Rs. 40,000; and (3) high more than Rs. 40,000. The classification is arbitrary but not incompatible with the argument presented in this section.

3.11. Out of pocket payment is progressive in inpatient care but not so in outpatient care

3.11.1. The findings in an earlier study strongly suggests that the users' opportunity cost of accessing health care services in West Bengal is often very high (Kanjilal and Pearson, 2002). The evidences from the present study also support this phenomenon. As Figure 3.13 shows, about 28 percent of potential users who could not access modern outpatient services in rural Bengal were barred from accessing services only due to economic reasons. As expected, the barrier is more prohibitive for families in the poorer groups; around 41 percent of the persons belonging to the poorest quintile could not access outpatient services for economic reasons the corresponding figure for the richest quintile is only 6.5 percent.

Figure 3.13. Percentage of rural ailing persons who could not seek treatment due to financial constraint, by asset quintiles (3 districts, West Bengal)



3.11.2. What happens to those who access services? Table 3.8 shows that the impact varies not only across rural and urban areas, but also with respect to the type of care (inpatient and outpatient care) and socio-economic groups. Regarding

Table 3.8. Percentage of annual household expenditure spent on medical care, by socio-economic groups (3 districts, West Bengal)

Rural

Asset Quintile	Inpatient care		Outpatient care	
	% of households affected (in a year)	% of their annual expenditure spent	% of households affected (in 3 months)	% of their annual Expenditure spent (annually)
	16.63	10.41	90.44	4.32
	17.67	11.02	92.31	4.48
	19.58	10.72	94.58	4.44
	16.46	13.02	93.96	3.86
	19.38	16.24	95.42	3.59

Urban

Asset Quintile	Inpatient care		Outpatient care	
	% of households affected (in a year)	% of their annual expenditure spent	% of households affected (in 3 months)	% of their annual Expenditure spent (annually)
Poorest	20.00	4.04	86.67	2.95
Next 20%	17.88	11.41	87.42	2.16
Next 20%	18.12	6.56	91.95	2.82
Next 20%	19.33	8.30	88.67	2.46
Richest	15.33	18.18	92.67	2.24

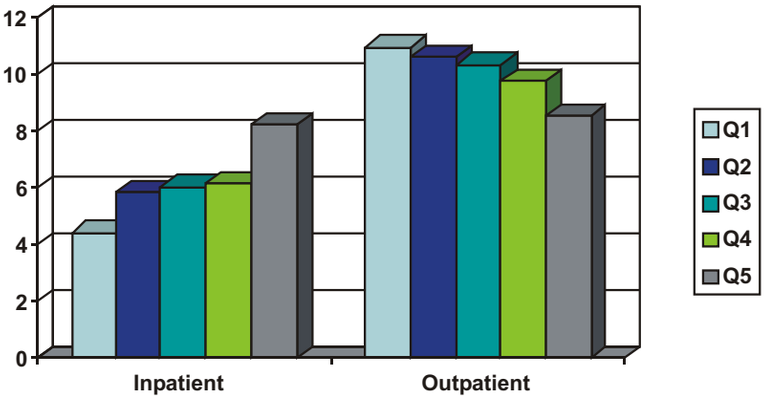
inpatient care, it is obvious that the impact of out of pocket payment is relatively more severe on higher income groups indicating a *progressive* out of pocket financing system[9]. One out of five households from this group is likely to send at least one member to hospitals (for inpatient care) which will account for one-sixth of their annual household expenditure three times more than a normal scenario. The poorest households are likely to send fewer members (17%), and spend proportionately much less (10.4%). The implication is clear - hospitalization makes middle and upper-middle income groups also vulnerable to major health shocks.

3.11.3. It is interesting to note that the impact somewhat reverses in case of outpatient care where poorer households spend more in relative terms. Almost all households were affected in a quarter (90-95%) and a rural household in the poorest quintile would spend around 4..3 percent of its annual expenditure (compared to 3.59% spent by the richest quintile). The severity of economic drain is much less for urban residents primarily due to lower economic barriers to access.

3.11.4. The above analysis raises an important issue from equity angle. While it is universally accepted that hospitalization implies catastrophe to the economy of an affected household, ambulatory or outpatient care begets no less disaster. It hits at a much slower rate but erodes the economic base of many more households in a more definite way. As a whole, it seems to perpetuate chronic poverty more than inpatient care does.

3.11.5. One crude benchmark of such catastrophe is the share of medical expenses in total household expenditure. Roughly speaking, a payment is catastrophic to a household if the share is more than 10 percent [Pradhan and Prescott (2002), Ranson (2002)]. Figure 3.14 shows that inpatient care is relatively more catastrophic to the richer households. On the other hand, it also shows that outpatient care is more catastrophic than inpatient care in terms of percentage of households. While about 4 percent of poorest households made catastrophic payments for inpatient care, more than 10 percent did so for outpatient care. It is also quite evident that the impact is relatively heavier on the poorer section indicating a *regressive* financing for outpatient care.

Figure 3.14. Percentage of total households spending more than 10% of their annual total expenditure on medical care, by quintiles (3 districts, West Bengal)



3.11.6. Progressivity in OOP financing in case of inpatient care may be explained in terms of near-complete dependence of poorer people on government hospitals. On the other hand, a significant portion of the richest section about 36 percent (see Figure 3.2) - seeks inpatient care from private hospitals and consequently absorbs heavier economic burden. Regressivity in outpatient care financing possibly has its roots in two factors: (1) most people seek treatment

[9]Here, progressive out of pocket financing is defined as a state when OOPE as a percentage of total household expenditure increases with respect to increase in ability to pay. A regressive financing would describe just the opposite scenario.

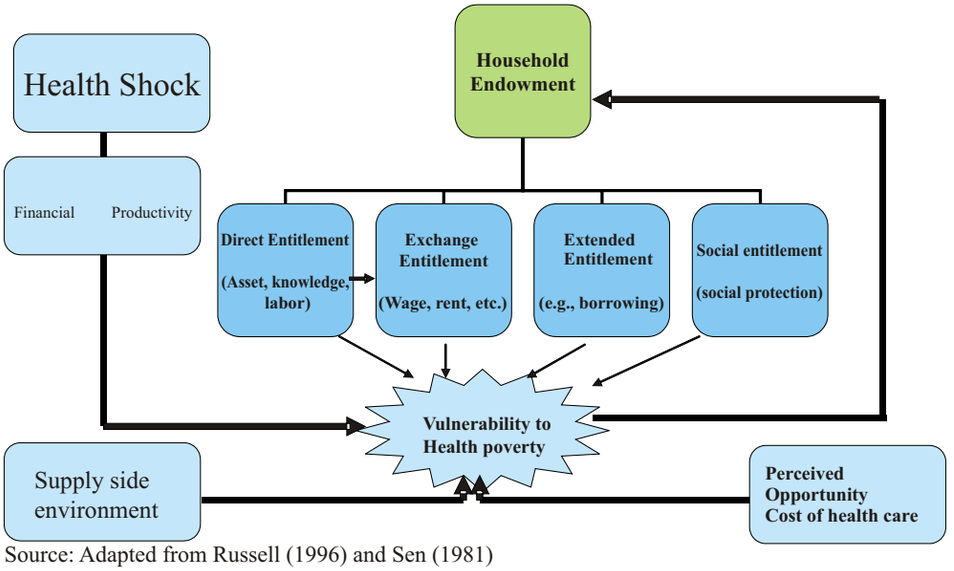
from the private market, and (2) even those who visit government facilities obtain many drugs from private sector rich and poor alike - implying that the financial burden is inequitably distributed among population.

3.12. Growing health poverty in a socially unprotected environment

A conceptual framework

3.12.1. Medical care imposes economic burden on households, but how is it related to poverty? The question is especially relevant in the context of India's health care system where, due to absence of any full-proof risk protection mechanism, the entire burden is more often absorbed by the households. Figure 3.15 presents a conceptual framework[10] to explain the dynamic relationship between poverty and health shock. The pivot element in this framework is the concept of health poverty which is defined as a process of immiserisation of a household due to health shock an external shock to the household. The shock manifests in possible erosion of the economic base of an affected household through two parallel ways: (1) loss in productivity due to health problem, and (2) financial burden of treatment. The degree of erosion would depend not only on the frequency and gravity of the shock, but also on the *vulnerability* of the affected household to health poverty.

Figure 3.15. Health and poverty: a conceptual framework



Source: Adapted from Russell (1996) and Sen (1981)

3.12.2. Vulnerability to health poverty, in turn, is determined by three factors:

(i) household entitlements which also define the household endowment at a particular point of time,
(ii) supply side environment, and
(iii) perceived opportunity cost of seeking health care.

[10] Adapted from Russell (1996) and Sen (1981).

3.12.3. Entitlements, i.e., households' command over alternative bundles of commodities, may be classified into four types:

- Direct entitlements or Assets: This includes assets such as land and labor, and own produced crops / livestock
- Exchange entitlement: Assets and direct entitlements translated into cash which may be used for saving and spending on consumption, i.e., regular income and savings.
- Extended entitlements:These emerge from social relations and add to household's command over commodities; for example, access to credit and gift from professional moneylenders and relatives.
- Social entitlements: Open access to social security or welfare (e.g., provident fund, social insurance, old age pension, public distribution system, subsidized public health care system, etc.). These can form an important component of a household's entitlement set in a welfare economy.

The entitlements act as absorber of health shock. In other words, a household with a piece of saleable land, higher level of income, higher creditworthiness, and / or access to social security is less vulnerable to health related financial shock compared to one which has none or less of them.

3.12.4. Vulnerability to health poverty also depends on supply side environment. The typical question to assess this environment would be whether there is any effective mechanism at service delivery point to identify the poor and vulnerable, and protect them from impoverishing effect of health care. Open access to public health facilities may indicate a good environment, but the same coupled with an effective targeting mechanism would be better.

3.12.5. Finally, the opportunity cost perceived by the users of health care plays an important role to define vulnerability. It is often found that the pattern of response to a particular disease or a ailing household member changes across households. Consequently, the degree of sacrifice varies across households over a particular health shock leading to varying levels of vulnerability. For example, a household may sell its assets to pay for an institutional delivery while another (with same entitlement set) may opt for home delivery and manage it without selling an asset.

Evidences on entitlements

3.12.6. The FHS study made a preliminary attempt to assess the vulnerability through the components mentioned above. The guiding question was: how do households use their entitlements as a coping strategy when at least one member seeks inpatient or outpatient care? The answer to this question is expected to indicate the status of vulnerability among the households.

3.12.7. Table 3.9 shows how the affected households used their entitlements to cope with financial shock for various health cares. As expected, inpatient care made the affected households draw more upon extended entitlements (23% borrowed with interest and 36% borrowed without interest) compared to outpatient care (2.8% and 8.5%, respectively).

Table 3.9. Percentage distribution of households, by sources they used for financing medical care (3 districts, West Bengal)

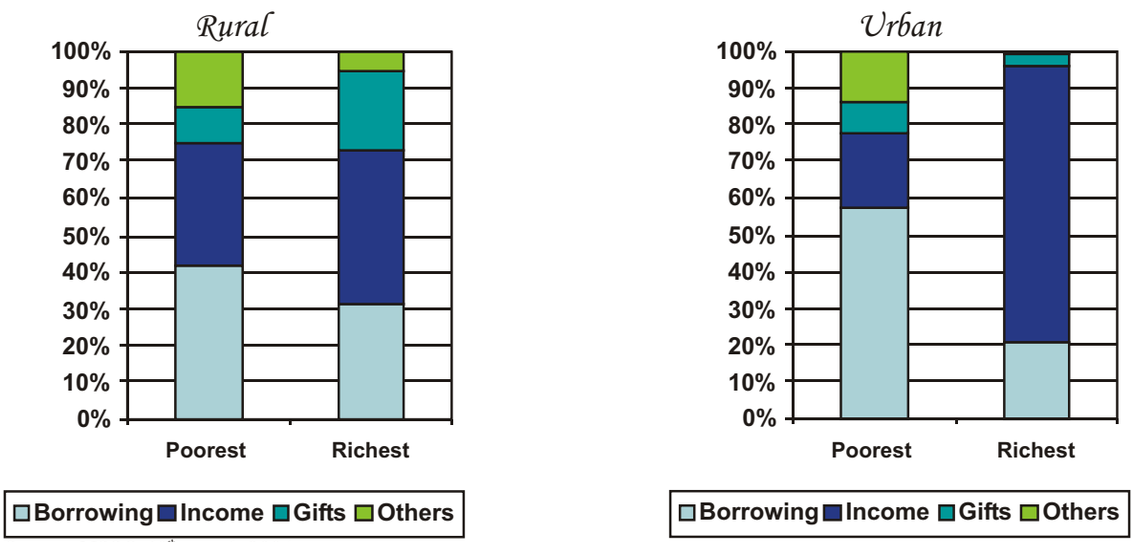
Sources of financing (%)	Inpatient care	Outpatient care	Birth delivery
N	644	6303	483
Saving	29	16	31.7
Borrowing with interest	23.1	2.8	10.1
Borrowing without interest	36.3	8.5	21.3
General income	51.5	81.6	60.5
Selling property	3.1	0.4	1
Mortgaging property	0.6	0.1	0
Others	5	1.6	8.1

* Total may not add to 100% due to multiple responses

3.12.8. As mentioned above, health problems act as a shock to the equilibrium of household economy. In a situation where social entitlement is weak, a household draws upon its other entitlements. It is expected that it would cope with the shock first on exchange entitlements (i.e, its regular income); it is expected to fall upon extended entitlements (for example, borrowing) and ultimately to direct entitlements (for example, selling assets) when its exchange entitlement turns insufficient. Naturally, the graver the shock is, the more a household is expected to resort to extended and direct entitlements. This, in turn, leads to erosion of the household's economic base and enhances its vulnerability to future shocks.

3.12.9. Figure 3.16 presents the relative share of various sources of financing to pay for, say Rs. 100, on inpatient care. For this purpose, NSSO data are used since the FHS survey did not collect the amount of financing from each source[11]. It is quite evident that households in the poorest quintile depended more on borrowing (extended entitlement) in comparison to the richest quintile especially in urban areas. Relative share of "other" which includes selling / mortgaging assets is also conspicuously higher for poorest section. The underlying process reflects their inherent weakness to counter catastrophic expenses of inpatient care. However, it also reflects that the rural rich are comparatively more vulnerable than urban rich since the former uses extended entitlements more extensively then the latter.

Figure 3.16. Percentage share of various sources in total out of pocket payments for <u>inpatient care</u>, by expenditure quintiles, West Bengal



Source: NSSO 60th round, 2004

3.12.10. The findings presented above focused on inpatient care. Apparently, the outpatient care does not shake the entitlement base so brusquely (only 11% resorted to borrowing). The reason for such apparent milder effect remains in the way the shock manifests. The shock, in this case, acts like a slow poison leading to a gradual erosion of household's economic base. A snapshot of the effect of one or two episodes (in last three months as asked in the

[11] The FHS survey asked which sources (not how much) were used to pay for medical care. The results are given in Table 3.9. The NSSO survey, on the other hand, asked how much was sourced from each category.

interview) is less likely to capture this dynamic effect. The presents study acknowledges this limitation and proposes to undertake a research on inter-temporal effect of acute and chronic ailments on vulnerability to health poverty.

3.12.11. The findings presented above raises concern about the social entitlement a typical household in West Bengal have the benefit of. Is there any social protection instrument by which a household, under duress due to medical care, can be protected? Table 3.10 demonstrates that the state, like other Indian states, has a long way to go to achieve this goal. Except ration card (i.e., membership in subsidized public distribution system) and life insurance, no significant protective mechanism exists. Risk pooling through medical insurance is still far from reality as only a little above 5 percent of households were found to have some sort of health insurance.

Table 3.10. Percent of households who are covered by various social protection mechanisms (3 districts, West Bengal)

% of HH who have the benefits of	Total	Rural	Urban
Provident fund	13.9	11.7	21.4
Life insurance	31.3	28.5	40.2
Old-age pension	1.2	1.4	0.4
Crop insurance	0.4	0.5	0.0
Support from Panchayet	16.8	21.7	0.9
Other support from govt.	1.5	1.7	0.8
Ration card	91.7	91.8	91.4
Social health Insurance	**3.2**	**1.4**	**9.3**
Other health insurance	**2.2**	**1.5**	**4.4**

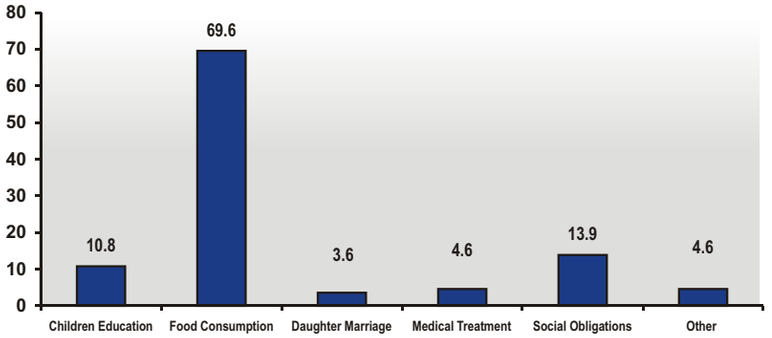
Evidences on opportunity costs

3.12.12. Economic stress, caused by medical care, may also be viewed from its opportunity cost to an affected household. For example, a low-income household, which is already sustaining on subsistence level, may have to delay medical treatment of one member when another member is hospitalized. Similarly, the children may drop out from schools or some social event (e.g., marriage) may be delayed. Although no attempt was made to quantify these opportunity costs, the FHS study tried to understand the nature of such costs. As Figure 3.17 indicates in case of inpatient care most of the households (70%) compromised food consumption while about 14 percent delayed social obligations (e.g., marriage or *Puja*) and 10 percent had to underspend on children's education.

Evidences on supply side environment

3.12.13. The earlier sections (Section 3.2 3.10) suggest that West Bengal is one of the very few states where open and easy access to public facilities has led to overwhelming dominance of public facilities in inpatient care market. These facilities, despite their flaws, often stand as the only resort to poorer sections. However, the state also demonstrates that subsidized public health care does not provide enough ammunition, or pool the risks enough, to protect people from the impoverishing effect of health care.

Figure 3.17. Percent of households compromising or postponing consumption decision after they sought inpatient care (3 districts, West Bengal)



3.12.14. It is a common understanding that an effective targeting and consequent cross-subsidization may help create a protective shield around those who needs external support for protection. However, the problem remains in identifying the poor and vulnerable - a crucial prerequisite for targeting. Without a well-defined mechanism for identification, the existing system follows ad hoc approaches. One glaring example is the existing exemption policy in collecting user charges at hospitals where any person is exempted if he / she produces an indigent certificate issued by any elected representative of any level. Consequently, almost everybody gets exempted (see 2.3.7).

3.12.15. In brief, without much social protection, households resort to the natural coping mechanism - a reactive strategy - which usually implies drastic erosion of household resources. The following two case studies from two districts of the state demonstrate how a typically poor household gets into poverty trap due to this reactive strategy (Boxes 3.6 and 3.7)

Box 3.6: How health and poverty are linked: Pratham's story

Pratham Mahato, a 33-year old male, is a marginal farmer in the block of Jhalda II in Purulia district. Since his own land is not big enough to feed his family for the whole year, he is forced also to work as a daily labourer. At one night in April 2000, he felt an excruciating pain in his stomach. In the morning, he was admitted to the Kotshila BPHC where he was treated for 3 days. His family had to buy all medicines from a private pharmacy except the saline, which was given free by the hospital. Next he was taken to the Purulia district hospital where he received treatment for 7 days, and his stomach was X-rayed free of cost. Except for a few supplied by the hospital, Pratham's family bought all medicines (for Rs.3000). Seeing no result, his family next consulted Dr. Das, a general private practitioner of Jhalda. He assured a complete remedy and treated Pratham with a few pain killer tablets and a bottle of saline and got him again X-rayed, charging Rs.1000 for all this. With no diagnosis and no result, his family finally admitted him to famous St. Barnabas Hospital at Ranchi where the attending doctor recommended a series of blood tests.

Pratham was then referred for an ultra-sonography test which showed serious problems in his intestines. Surgical intervention was necessary. After his operation, he spent 14 days at the hospital and received 35 bottles of saline, 42 shots, and varieties of medicines during the period. The stitches were removed and the patient was discharged on the fifteenth day. Meanwhile his family had already spent Rs. 26000 on hospital charges, tests, and medicines.

The hospital had prescribed medication for four months; after that period, Pratham went to Ranchi for a check up where he was diagnosed as fully cured. But, after one year, (in June 2002) the sharp old pain came back and Pratham was forced to go to the Kotshila BPHC. The medical officer saw his past treatment records and pushed an injection and gave him 12 tablets for 3 days. He feels easy now, but his past experience haunts him. The expenses in the first treatment made him sell a piece of land at Rs.18000 though its actual price was Rs. 30000. He also sold 2 buffaloes, 10 goats and even borrowed Rs. 3000 from a local moneylender at 10% interest per month. He does not find any hope to recover from the loss in his lifetime.

Source: Kanjilal B and M Pearson (2003)

Box 3.7. How health and poverty are linked: Anil's story

In the first week of August, 1997, Anil, a 47 year old farmer in the village of Mornia (Block: Dinhata II), suddenly felt an acute pain in his chest and lower abdomen. It became difficult for him to eat anything. In the middle of that month, the intensity of the pain shot up. The local RMP (unqualified allopathic doctor) failed but another RMP gave him a short respite. The pain, however, returned soon. The next 20 months were lost in futile attempts by consulting one RMP after another. At the long last, one RMP diagnosed the problem as Gastric Ulcer, and strictly advised him to avoid red meat, heavy-weight fishes, and any spicy food. He was recommended only pulp-boiled rice, *papaya*, *shuji,* and simple fish curry (of *Singhi* and *Magur* fish). It was going on all right, with the spicy-food-loving Anil keeping a vigil on himself, but everything changed when a 10 Kg grass carp was caught in the pond adjacent to his house. After a verbal dual with his wife, he ate a few pieces of that fish (cooked with generous doses of spice and oil).

Acute chest pain, inflammation, and asphyxiation followed 4 hours after the intake and he was admitted to the Dinhata SDH on that night. The doctor attending the emergency immediately administered a few shots and medicines. His stomach was also pumped out. He was in the general medical ward for 3 days. Another doctor took over and recommended immediate USG which was done at a private centre in Kochbihar town. It all cost his family Rs.1350 and yet nothing was found in the report. A free X-ray in the Dinhata SDH also produced nothing even after nine retakes. Another USG this time at Rs.1500. The process continued for thirty-five days with slight recovery probably due to injections and Medicines (purchased from private outlets) given during this period. The doctor restricted his diet to rice, easily digestible small fishes (*Singhi*, *Magur*, *Pona* etc.), Papaya and curd.

The problem, however, was not completely solved. In order to totally sort out his ailment, Anil began to consult doctors randomly. All of them, however, endorsed the past treatment regime. Frustration set in, and, at last, he started finding solace in alcohol. By April 2002, Anil's condition began to deteriorate rapidly. He has now reached a highly emaciated state, like a skeleton with skin and is even unable to get up from his bed. Financial resources have dried up and he has now come back to cheaper option of treatment provider - the local quack (*haturey*). The quack's treatment is being supplemented by services rendered by other traditional providers (such as, Ayurvedic, faith healers, etc.).

Anil's struggle with ailments has so far stripped his family off 2½ bighas (81.5 decimals) of farmland, 3 milk producing cows, all gold ornaments, a few big trees and a loan of Rs. 15000. The family now survives on the wages (irregular, approximately Rs.8000 per annum) of his two kids who work as daily labourer. The only property left is a dilapidated homestead with a small piece of backyard (15 *Kathas).*

Source: Kanjilal B and M Pearson (2003)

4. Towards a more equitable future: how can research help?

4.1. How to make the system work more for the poor?

4.1.1. What can be done now to make the health care system work more for the poor and make a more equitable future? On the basis of situation analysis presented above we identify the following five broad policy objectives for strengthening the equity base of the health care system in the state:

- **The population are protected from the financial consequences of ill health (especially catastrophic ill health) and are not denied essential health services because of inability to pay.**
- **Public financing of health care is more accountable at the ground level to ensure that maximum benefits from flow of public subsidies to poor.**
- **Public funds are allocated in ways consistent with national and state health policies and are utilized efficiently.**
- **Removing the barriers against equitable preventive care and maternal health care.**
- **Private sector is internalized and made to work towards the common vision**

4.1.2. The specific options to meet the above objectives are:

- Develop a closer working relation with informal sector
- Ensure local oversight for implementing pro-poor strategies and resource tracking
- Reduce asymmetric information in drugs market to empower the consumers
- Develop appropriate risk pooling mechanism especially for economically disadvantaged section.
- Improve targeting in public subsidies for essential health care.
- Address the barriers to preventive care and safe birth delivery especially in under-served areas.
- Facilitate and regulate private sector

4.1.2. How can research help meet these objectives? For a responsive health care system, it is necessary that research results would not only feed into the policy making process, but also influence the implementation process through innovative ideas. The future health system, as envisaged by FHS research, would be distinctively marked on this aspect. The results of scoping studies are expected to help policy makers take informed decision; new ideas will be tested through well-planned action research; system performance will be assessed through innovative tools; and, evidences will be regularly generated to oversee the progress towards a more equitable system. The scope of research is, therefore, indicated at the end of each of the following sections.

4.2. Develop a closer working relation with informal sector

4.2.1. The study highlights the urgent need for addressing the silent but all-pervasive spread of Rural Medical Practitioners (RMPs) in rural health care market (see Section 3.5). Two clear policy options emerge from the study:

(i) Ensure adequate basic health care facilities with qualified health care providers who would remain available round-the-clock for basic curative services and birth delivery. The purpose, in this case, is to "crowd out" RMPs by government-sponsored competitors.

(ii) The alternative option is to internalize RMPs within the system and feed on their strengths in a guided manner. For example, a section of RMPs may be empanelled or franchised to help them operate as "gatekeepers" of primary health care.

4.2.2. The first option, despite its popularity among public health researchers, is seriously constrained by two factors: (1) perennial shortage of government doctors in rural areas primarily due to their reluctance to serve there, and (2) resource crunch in providing adequate infrastructure, drugs, and maintenance inputs to meet the huge need for basic curative care. Further, supplying doctors and other inputs is not enough to compete with RMPs as long as RMPs excel formal providers in packaging their services.

4.2.3. The second option has clear advantages on these aspects the option allows the system to use a huge pool of resources (i.e., RMPs) which is being used by the people anyway. However, the risk, as mentioned earlier, remains in their huge potential to generate adverse health effects through immature applications of medical science. The additional barriers are (1) the legal aspects which may bar involving a RMP in formal medical care, and (2) the intrinsic profit motive of RMPs which may not adjust with the public health goals of the government.

4.2.4. Several experiments at the international and national levels demonstrated that minimizing the risk and overcoming the barriers is not an impossible task. The study strongly suggests such a strategic experiment, at least at a particular district as a prototype. The basic components of such an experiment might be:

- Empanel selected RMPs at each block as "Rural health gate keepers." Empanelment should be based on several essential quality indicators. The program may be initially started where public system is relatively weak. The role of the RMP will be to provide a set of basic curative services and refer cases immediately to formal providers as and when the patient crosses the identified "safe treatment".
- Identify a set of basic curative and preventive services for which the RMPs will be given franchise right to operate as official gatekeepers.
- Involve civil societies (Panchayet or NGO) in implementing empanelment and mentoring the RMPs.
- Provide intensive training to selected RMPs on simple treatments, identifying potentially complicated cases and "danger mark" where they have to refer.

It is also important to devise an incentive structure (monetary and otherwise) for adopting franchise right and adhering to standard protocols.

Research scope

4.2.5. The present study is the first step towards understanding the role and potential of RMPs as a part of huge informal sector in India's health care market. Several issues emerged from the present study all of which could not be conclusively addressed due to its limited scope. The limitations in the present study encourages Future Health System project to embark on exploring further on this issue with a broader canvas. The research questions for future research in this area could be broadly delineated as:

- How "safe" or "unsafe" are the current clinical practices of RMPs?
- What is the net impact of RMP practices on rural health?
- How feasible is it to integrate RMPs into existing public health care system?

4.2.6. The last question would require designing an operational research with a strategic intervention plan with RMPs which could be implemented in one or two districts of West Bengal. The intervention may be aligned to the steps outlined in previous section with appropriate modifications.

4.3. Ensure local oversight for implementing pro-poor strategies

4.3.1. As discussed earlier, the routine fund flow to the districts, which constitutes the major share of total fund flow, is channelized through the district health department through its Drawing and Disbursement Officers (DDO). The lion's share of this fund is earmarked for salary and maintenance leaving little room for maneuver. Tracking resources in this case implies tracking the performance of human resources which the system has been doing anyway. However, still there are a few important items for which tracking intervention may be initiated:

(i) Delivery of drugs and consumables at government facilities is it consistent with the standard treatment protocol and essential drug list? Does a poor have to buy drugs from private pharmacies even when it is not necessary?
(ii) Disbursement of untied funds for special medical assistance to the poor is it really going to the poor?
(iii) Program funds flowing through the societies what is the health outcome?
(iv) Funds generated through user charges and retained at the district level is it really being spent on welfare of patients (Rogi Kalyan)?
(v) Funds from special schemes, such as JSY or PMGY to what extent they benefit the targeted beneficiaries?

4.3.2. All these questions are difficult to answer at present due to absence of local oversight. In some cases, specialized studies need to be done (for example, tracking JSY fund). However, the decentralization and devolution strategy of the state has also created a potentially powerful institution in the form of District and Block level societies (DHFWS and BHFWS). The societies have recently gained more attention with a clear intention that district management of health care must be strengthened to reap the benefits of decentralization strategies.

4.3.3. As discussed earlier, the present centre-state relationship in the context of implementation of vertical programmes is one of the factors which restricts DHFWS to playing a post-office role with respect to management of the mobilized resources. Each of the programmes requires a separate book-keeping system and restricts the ear-marked fund to be used towards a predetermined direction. The role of DHFWS is extremely limited in this fund flow mechanism and is not likely to change in the short run.

4.3.4. Given the constraints, the best a DHFWS can do in this context is to keep track of the resources flowing in through this mechanism, prepare a consolidated account, and comes up with a performance index of each programme on the basis of a simplified 'source and use' matrix. The necessary steps to meet this objective would be to (1) calculate total funds flowing in under the vertical and other programmes; (2) prepare a performance index of each programme based on their progress in meeting target output within a specific period of time; and (3) estimate expenditure per unit of performance index. The results are expected to provide the top management of DHFWS with crucial inputs for monitoring the progress of the programmes.

4.3.5. Financial accountability is one of the major issues related to financing efficiency of the system. The current practice followed by the societies (and, DHFWS) does not promote better accountability. The approach is often simplified to expedite the receipt of funds from the central programme units. As a result financial reports on fund utilization from the district societies are sent upwards based on the amount of fund released to the block level, not on whether and how they were spent.

4.3.6. One way to address the problem is to link release of funds to a set of crude performance index (as mentioned above) prepared for each block. This may be supplemented by random performance audit at the field level. The audit may be carried out by selected non-government organizations, or, by a separate technical cell of DHFWS.

4.3.7. Increasing flow of untied funds (for example, a part of user charges) has created an excellent opportunity for DHFWS to rig up innovative ways for protecting poors' interest. There are opportunities to initiate demand side financing at a small scale for example, subsidized food coupons for poor patients and their attendants, or vouchers for purchasing drugs to those who can hardly afford to obtain by themselves.

4.3.8. The oversight role may be initiated through establishing an information system which would be regularly fed in by data collected through patient satisfaction survey, disease surveillance, costing of services, district health accounts, and forecasting local need for drugs. It would inform how many women received JSY assistance and how many still need help, and so on.

4.3.9. What is the expected output from this empowered decentralization? Local control allows for management, planning, and use of resources that responds directly to district needs. Health facilities will be adequately stocked, equipped, and placed where they are most likely to be accessed by the poor. Retained user fees and centrally provided funds will be spent on community health concerns, rather than on central priorities. Medical personnel who answer to communities rather than to supervisors at the state or national level are more likely to treat their clients with respect, giving them the time they need for quality services.

Research scope

4.3.10. It is quite obvious that the existing level of capacity of the district management team of DHFWS is inadequate to play such an extended role envisaged above. It is therefore essential that a short-term and a medium-term plan be designed to build and strengthen the institutional capacity of the team. This should be based on a thorough needs assessment exercise, and then filling in the appropriate skill gap through rigorous in situ training process. The FHS research proposes to undertake this exercise in one of the districts on a pilot basis.

4.3.11. The initiative may be framed as a pilot research programme in one district. The guiding research question would be whether the district health care system, with their scope and capacity extended, can make itself work more for the poor? More specifically, it would explore whether the ongoing initiatives for decentralization strengthening the DHFWS in particular could be translated into a platform in the short run for (i) generating evidences through an information system (see 4.3.8) and (ii) helping channelize the untied resources towards poor users of health care through demand side financing. In the long run, it could also be tested whether it can generate local resources through risk pooling mechanism - to establish a fund for protecting poor and vulnerable from health related financial shock (more on this in Section 4.5).

4.4. Reduce asymmetric information in drugs market to empower the consumers

4.4.1. As discussed earlier (see Section 3.10) expenses on drugs constitute more than 80 percent of out of pocket expenses especially in outpatient care. One of the fundamental problems in Indian health system is poor accessibility to low-cost drugs especially by the poorer section of population. The poor clients receiving care from the public or private sources are often directed by the providers to purchase high-priced or irrational drugs. The pharmacies in public

hospitals, which are supposed to provide the users with free medicines, frequently fail to meet the prescribed needs, and, thereby pushing them to obtain medicines from private pharmacies. The cheaper alternatives are usually not mentioned in the prescription making the consumers spend a high proportion of their total out-of-pocket medical expenditure on medicines.

4.4.2. Protection of people from health poverty thus necessarily boils down to protecting them from irrational drug expenses. One of the important factors influencing the irrational process is high degree of asymmetry of information in the medicines market. The clients do not have any bargaining power since they do not have any information on the cheaper alternatives and that they could be equally useful. The asymmetry is further widened due to common practice of the providers prescribing branded medicines. The variation in prices of a single medicine across different brands is quite significant.

Research scope

4.4.3. The interventions so far undertaken are primarily from the supply side. EDL has been prepared, doctors have been instructed to prescribe generic drugs, standard treatment protocols are now available, and so on. The problem still remains unresolved. While acknowledging the importance of these interventions, the FHS research forwards the hypothesis that the out-of-pocket expenditure on medicines could be significantly reduced if the consumers are adequately empowered with information on (1) cheaper (but equally useful) and generic options of prescribed branded medicines; and (2) a distinction between essential and non-essential medicines in the context of a specific disease. The information is expected to generate certain degree of negotiating power when they visit a provider, and, more importantly, when they visit the private pharmacies for purchasing drugs. The empowerment process could be implemented by involving the local level civil societies and local self administration (e.g., Panchayet). The process could be initiated after a scoping study on the degree of asymmetric information in the market and how this is being used by the imperfect agents (i.e., providers and pharmacies).

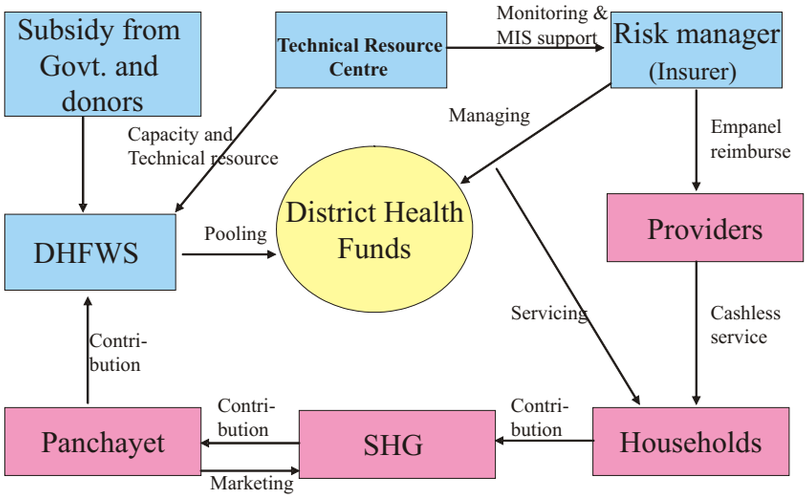
4.5. Develop appropriate risk pooling mechanism especially for economically disadvantaged section.

4.5.1. The inadequacy of public health care delivery system as a risk pooling mechanism has made people helpless in case of financially catastrophic illnesses or conditions. Is insurance a solution? Conceptually, insurance is a risk pooling mechanism which may also be more successful in mobilizing additional private household resources as individuals are assessed premiums when they are in good health and better able to afford payments. Insurance can be as simple as community funds to transport women with complicated deliveries to hospitals, or as complicated as health maintenance funds that reimburse providers for all health needs including preventive and curative functions. Encouragingly, the state government has recently embarked on a serious initiative to work out a suitable model for risk pooling in the state.

4.5.2. The products designed by for-profit private health insurers are not a solution to a rural or urban poor person. On the other hand, it is most unlikely to see the government, which is already financing the public health care, to take the whole financial burden of a social insurance scheme that would cover the financial risk of the poor. What, then, is the option? One feasible way to protect the financial risk of the poor would be to focus on a district-based health fund scheme. In this case, the District Health and Family Welfare Society would be the custodian of all health funds received from the central, the state and the donors, and the user charges for the secondary care. It would also collect

pre-payment from the community according to their ability to pay. A preliminary outline of this framework is given in Figure 4.1[12].

Figure 4.1. A conceptual framework on district health fund



4.5.3. The pivot element of this frame work is the District Health Fund (DHF). The main purpose of this fund is to provide financial protection to those households who need it after receiving a health shock. The fund has two sources: (1) subsidy (if any) and untied funds from government and donors, and (2) households, through risk premium. The households' contribution flows through some organized groups, such as Self Help Groups (SHG) to DHF through established civil society organization, such as Panchayet. The distinctive feature of such an initiative is to consider the community group (SHG), not an individual or a household, as the base unit of contact.

4.5.4. The second component is the insurer which will underwrite the risk and manage claims with or without Third Party Administrators (TPA) on the basis of a well-defined contract with the district society (DHFWS). The third component is the set of providers comprising of selected private and public hospitals. The major problem in this case would be to define the public providers. The existing model of provision of public health services is clearly a misfit in the proposed system since, theoretically, it is supposed to provide almost free services to the user at the lower (i.e., PHC) level. Clearly, the state needs to realign its subsidy policy to match it with the regime of health insurance financing. Currently the state is playing the dual role a provider as well as a financier. A health insurance paradigm ideally requires it to assume a single role preferably a provider.

4.5.5. The existing policy environment in the state clearly indicates that subsidy policy at least at the primary level of health care - is unlikely to change in near future. A pragmatic approach, therefore, is to start reform the financing strategy from the top layer of the delivery system, i.e., from the secondary and tertiary level of care where already people are participating in purchase of services (through user charges). In other words, at the initial phase, the services at secondary / tertiary level may be priced on a full-cost basis. The enrollees will receive fully cash-less services and

[12] *The framework is a modified version of one proposed to the DHoFW by GTZ (West Bengal) as a part of its proposal on "Social protection for informal sector in West Bengal". The version and views presented here are not necessarily those of GTZ or DHoFW.*

Products (IPD, drugs, tests, wage-loss, etc.) in exchange of community-rated premium. The hospitals will be reimbursed from the district pooled fund.

4.5.6. The proposed mechanism (as shown above) will work at the district level in the following way:

i. The DHFWS will establish a separate wing within itself named as *District Health Fund Unit (DHFU)*. The unit will hold the (1) premium contributions received from the target beneficiaries; (2) premium subsidies paid by the government and donors; and (3) any other untied fund meant for poors' health.

ii. DHFU will outsource the management of this fund and underwriting responsibility to a professional insurer, or any other institution it deems fit. The contracted institution will also do quality accreditation and empanelment, and 24 hours servicing

iii. For collection of contribution and marketing, DHFU will contract the District Panchayet (Zilla Panchayet) which, in turn, will contract block and village Panchayets to ensure a steady collection from the SHGs.

iv. DHFU will have a contractual relationship with empanelled providers (public and private) which will include rate setting, payment contract, and quality assurance. This responsibility may also be outsourced to the contracted risk manager.

v. DHFU will monitor the process and outcome of HI intervention. For this purpose, it will receive support and technical assistance from an autonomous resource Centre.

4.5.7. The main entry point at the village level will be the SHGs who will work in close collaboration with the Gram Panchayet (GP). The expected number of beneficiaries and level of collection will be decided by the Block Panchayet (BP) and concerned GP. The GP will market the product to SHGs and collect premium from them. The SHGs, therefore, will collect premium from their members and deposit it to the GP. The GP, in turn, will transfer the fund directly to DHFU or through Block Panchayet office. *It is important to note that the GP and their block counterpart will be eligible to claim some monetary incentive depending on the degree of enrolment.*

4.5.8. The role of a GP is thus crucial. They will not only work as a bridge partner between SHGs (or, beneficiaries) and the district health fund, but also they will promote HI as a part of their other social security initiatives. Further, it will directly connect the target beneficiaries where SHG is relatively weak or absent. The incentive structure (for GPs and BPs) should be adequately rewarding (on performance basis) to help them do so. Given the poor management capacity of the GPs (and BPs), it is imperative that an intensive capacity building and sensitization process is initiated with the Panchayet structure even before the HI intervention is launched. The resource centre proposed above may play a key role in this process.

4.5.9. District Health Fund may therefore be one of the key channels of risk pooling in the future health system. However, a few points, which emerged from the FHS research, need to be addressed once the final outline of such an initiative is shaped:

(i) As mentioned earlier (see Section 3.11) catastrophe due to hospitalization is often highlighted since it is conspicuously visible, but outpatient care also hurts the household economy, albeit in a slow but steady way. The out of pocket payment for outpatient care is regressive implying that poorer households are more hurt than better-off households. The bottom-line of this argument is that any mechanism for financial protection or risk pooling must cover outpatient care. This is, however, challenging since the risk is very evenly spread in this case (hence, pooling risk is difficult).

(ii) Setting a flat risk premium across various socio-economic groups defeats the principle of equity. However, it is also true that discriminatory pricing (or, discriminatory subsidy) is extremely difficult since it requires segmentation of beneficiaries in all villages according to their socio-economic status. The transaction cost of such an effort is prohibitively high especially when it is done by an external agency. A more cost-effective way would be to let the SHGs or the community groups rate the ability to pay of their members on a continuous scale to reach a given target of collection.

(iii) Insurance, as a risk pooling mechanism, should supplement but not substitute the government's fundamental role in health care, especially in the context of primary health care. The underlying proposition in the above statement is that the suggestions presented in other parts of this section (4.2 4.4 and 4.6-4.8) are equally relevant even when DHF or any other risk pooling mechanisms are adopted.

Research scope

4.5.10. The role of research in this area is extremely crucial. More specifically, research may focus on following issues:

(i) Developing a measurement criterion of vulnerability to health poverty by which households in a given area can be ranked according to their vulnerability. For example, a vulnerability index may be derived on the basis of evidences on entitlements, supply side environment, and perceived opportunity cost.

(ii) Costing major services in private and public hospitals by using standard costing format.

(iii) Generating evidences on out of pocket expenses to help derive the rate of risk premium.

(iv) Being a part of the Technical Resource Centre and providing all required research support.

4.5.11. The FHS research also likes to mould the proposed initiative in a pilot intervention frame (in a district). The pilot research, which may go concurrently with other proposed interventions given in other parts of this section (Section 4), would help DHFWS design and implement the proposed DHF concept in a particular district.

4.6. Improve targeting in public subsidies for essential health care.

4.6.1. The findings presented in Section 3 shows that subsidies flowing to finance public health delivery are not specifically targeted to poor. It is true that poor people use government facilities, but so do the rich. More pro-poor distribution of subsidies would require that (i) the richer groups move to private care, or unsubsidized public facilities such as paid inpatient wards, and (ii) out of pocket costs (especially the travel costs and drug costs) borne by a poor are also reduced.

4.6.2. The key hurdles on the way to meet the above requirements are (1) inadequate private hospitals at the block levels which leaves hardly any alternative choice for the better-off; and (2) high private cost to access the public facilities (often due to non-availability of services in the proximate areas). The indirect cost to access public facilities is quite evident from the FHS study; a public client of inpatient care spent about Rs. 530 about a quarter of his / her total out of pocket expenses - on travel and associated expenses. Clearly, development of infrastructure at the peripheral level would help reduce this burden.

4.6.3. However, infrastructure development is not sufficient by itself. Equity in access requires equity in quality of care. It is a common experience that the richer section has better capacity to jump the queue (to receive better quality of care at

public facilities) and to crowd out the poor. The root of the problem remains in existing user fee mechanisms in which one is free to "opt" for subsidized bed irrespective of his/her paying capacity. The solution, therefore, remains in a more equitable distribution through some sort of rationing by which the richer (including the government servants) will be able to access within the limit of a fixed quota of subsidized beds. This should be supplemented with a policy of total withdrawal of subsidy for those facilities that are accessed by the richer section (for example, private cabins) and recovery of the cost on 100 percent basis.

4.6.4. The analysis presented in Section 3.3 clearly indicates that there is a strong case for targeting younger (0 14 age-group) and older women (60 and above) who utilize much less inpatient care compared to their male counterparts. It is primarily a demand side issue (gender inequity within households); however, a more gender-sensitized role of providers is expected to improve the situation. It is important that the government hospitals seriously take note of this problem, try to understand the specific local barriers, and improvise innovative methods to address these barriers in their ongoing IEC campaigns.

Research scope

4.6.5. Future research in this area is expected to focus on two aspects: (1) generating evidences on various targeting mechanisms followed in other states (and, other developing countries) and assess their feasibility in the context of the state's health care system, and (2) assessment of the pro-poor schemes initiated by the Department of Health and FW at the ground level where it works and where it does not. The research may be integrated with the same described in Section 4.3 (Ensure local oversight).

4.7. Address the barriers to preventive care and safe birth delivery especially in under-served areas

4.7.1. The analysis presented in Sections 3.6 and 3.7 clearly indicate that there exist a few strong barriers, especially in some districts and some pockets within a district, to meet two important public health goals: universal immunization and safe birth delivery. The barriers include: (1) poor accessibility to public health services in some areas due to strong geographical adversity, (2) administrative weakness (for example, unavailability of outreach workers for various reasons), (3) economic constraints, and (4) weak demand due to socio- cultural factors. It is obvious that these under-served areas need special strategies to fight these barriers. Unfortunately, the information currently available with the Department of Health and FW is inadequate to map out these areas according to the nature of the barrier.

4.7.2. Once the under-served areas are mapped and their barriers are identified, it is necessary to draw up a set of special strategies to cover these areas. For instance, if an administrative block in a district shows chronic underperformance in children's immunization due to geographical inaccessibility the outreach services may be reinforced by involving a local NGO or a local non-government health care provider. Alternatively, mobile health camps may be organized which would also provide immunization services. Similarly, special initiatives may be undertaken to ensure safer home delivery in those areas where women do not use institutions for birth delivery for socio-cultural reasons. However, the actual strategy will ultimately depend on a scientific assessment of the barriers.

Research scope

4.7.3. There is an acute need for scientific information on what and how the barriers lead to underperformance. The first research step is, therefore, to study their impacts and map the under-served barriers assorted according to particular

barriers (in a particular district). The next step would be to assess various sets of options to act against those barriers and identify the set which is technically feasible and cost-effective. The next step would involve testing the selected strategies through a bunch of pilot interventions. Finally, the output of interventions would be evaluated in comparison to a control ("no intervention") area. The results of this research process would then be used to design a comprehensive strategy for the state.

4.8. Facilitate and regulate private sector

4.8.1. Given the predominant role of the private sector in curative care, the state should internalize it, in both its modern qualified and traditional forms, into health plans. The public sector is responsible for coordinating, but not necessarily delivering, affordable health care for all. For many middle- and high-income people, affordable health care exists in the private sector. When relatively prosperous clients use private sector services, scarce resources are freed up for higher quality and more accessible public services for the poor.

4.8.2. Internalization of private sector necessarily implies that the private sector is to complement, and not just co-exist with, the public sector. The process would require three strategic steps:

(i) Facilitate expansion of private market at those blocks or district headquarters where the government facilities are over-burdened. This would require creating market incentives through tax-subsidies and a collaborative but profitable arrangement with the existing government facilities. This may be supplemented by disincentive to further concentration of private hospitals either where government facilities are under-utilized or where it is over-concentrated.

(ii) Minimum standards for its operation need to be maintained and regulated. The existing process of licensing and re-licensing of private facilities is grossly ineffective and the legal framework is inadequate. Evidences are plenty that many private hospitals are taking advantage of this situation and being engaged in malpractices and violation of consumers' rights especially if the consumer is already in a disadvantaged situation. A complete re-look into this issue is essential.

(iii) Involvement of private sector in district planning process. This is especially important in the context of the ongoing process under National Rural Health Mission (NRHM). It is also to be noted that the department has embarked on an innovative scheme of partnership with the private hospitals regarding institutional delivery. However, these initiatives often become non-sustainable when the private partners are asked to share a pre-designed scheme. For sustainability, it is important to involve them from the conception stage of the schemes.

Research scope

4.8.3. Future research in this area should primarily focus on generating evidence on the spread and operation of private sector in the state. The key research questions that sill remain largely unanswered are: (1) to what extent the growth of private health care market is related to health poverty? (2) how this market is spread and to what extent it can help targeting at government facilities? (3) what are the formal mechanisms of quality assurance in private facilities and to what extent the standard benchmarks are complied? (4) how cost-effective are the ongoing initiatives of public-private partnerships, and so on. The results of research are expected to provide the policy makers with crucial evidences on the operation of the market and help them design an effective policy for internalizing the private sector.

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