SOCIAL DEVELOPMENT PAPERS

SOUTH ASIA SERIES



Bottom's up: To the role of Panchayati Raj Institutions in Health and Health services

Jeffrey Hammer Yamini Aiyar and Salimah Samji

Paper No. 98/ June 2006

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Foreword

Today we live in a world of sharp contrasts. There has been great progress in human and economic development. At the same time, deep-seated social and political imbalances continue to constrain opportunities for many of the world's poor. With more than a billion people living on less than a dollar a day, the gap between rich and poor is wide. Millions are also affected by war and other forms of violence, discrimination, or political exclusion. The Social Development Department at the World Bank works to incorporate an understanding of these social, institutional and political factors into development policies, projects and institutions to secure better outcomes on the ground for poor people.

With the goal of empowering poor and marginalized women and men, social development is a process of transforming institutions for greater inclusion, cohesion and accountability. There is a need, therefore, to understand better the social context of the country and the factors that drive societies, as well as the needs and priorities of poor people. Poor people's own voices tell us that poverty is more than low income—it is also about vulnerability, exclusion and isolation, unaccountable institutions, and powerlessness.

This *Working Paper Series* disseminates the findings of on-going social development analysis and practice at the World Bank. Topics include participation and civic engagement, conflict prevention and reconstruction, community-driven development, and social analysis and policy. These reports have had an important impact in disseminating cutting edge research and experience and among development practitioners, governments and civil society across different regions of the world.

In this context, we are pleased to introduce a subset of social development working papers from the South Asia region. The South Asia papers capture the policy shifts in the region that are aimed at transforming institutions towards greater inclusion and empowerment of poor people. Each of these papers dwells at some length on the broader policy context of these changes, and is a testimony of the extent to which Social Development has entered the discourse on policy and on transformation of key institutions. The papers cover a range of important topics, from how traditional axes of exclusion (across caste and gender lines) affect labor market outcomes, to a new understanding of one of India's largest anti-poverty programs. The papers often challenge conventional notions of poverty reduction and provide alternative ways of thinking about policy reform. In particular, many of the papers look at how the local state can play a more inclusive and accountable role in the development process to secure better outcomes for the poor. This critical look at the relationship between the state and citizens is an important part of South Asia's Social Development agenda.

Caroline Kende-Robb Acting Sector Director Social Development Department The World Bank

Introduction

India is currently witness to two trends that have the potential to significantly improve the health of its people. The *first* is the growing recognition that the system of public delivery of health services is in crisis¹. No progress can be made without first admitting the problem. Recent analyses show high absenteeism, low quality in clinical care, low satisfaction levels with care (clinical and with regards to courtesy, amenities, etc.) and rampant corruption.² This has led to mistrust of the system, a rapid increase in use of the private sector and its attendant problems: high out of pocket expenditures that take a serious toll from families³ and quality of care that is highly variable (from much worse to much better than in public facilities). An important reason for this appalling health scenario has been the lack of accountability in our public health services.

The second trend is India's bold efforts to strengthen the voice of the rural poor through decentralization to local governments. The Government of India (GoI) is increasingly looking at implementing the 73^{rd} Constitutional Amendment whose mandatory articles include: defining the Panchayati Raj Institutions (PRIs) by creating a three-tier system of local government; assigning key subjects to PRIs; mandating elections for PRIs including reservations for women, Scheduled Castes and Tribes; and addressing the continuance of existing laws relating to PRIs.

Box 1.1: Bringing Government Closer to the People through the Pris

Panchayats have long existed in India as a traditional local governance structure. The new three-tier system of local governance (District, Block and Village) builds on the Gandhian philosophy articulated during the constitutional debates, and combines traditional aspects with features to address the specific challenges of modern India. The system intends to put villagers at the center of the public decision-making process through democratic elections; and even more important, through the constitutional recognition of a new body, the gram sabha. The gram sabha, an assembly of all registered voters in a village or group of villages, is to be the ultimate decisionmaking body and the main instrument for checks and balances on local elected representatives.

Several mechanisms have been introduced in the Constitution and made mandatory for the states, particularly at the level of village governments. These mechanisms include democratic elections, periodic gram sabhas with mandates to approve local plans, and reserved seats for women, Scheduled Castes (SCs) and Scheduled Tribes (STs). In most states, these are complemented by village-level accountability mechanisms such as the right of recall, the disclosure of information, vigilance committees and ombudsmen.

Source: India rural governments and service delivery, World Bank, forthcoming

This paper argues that these two ostensibly separate trends can converge to generate real reform in the health sector in India through the potential for increased accountability that local governments can provide. The argument is that decentralization brings governments closer to people thereby allowing them to respond more effectively to local needs and preferences. Thus efforts at rural decentralization (post the 73rd amendment) have been undertaken within the context of strengthening accountability in governance structures. Moreover, proximity encourages better monitoring and enforcement.

¹ Public discussion in academia, government reports and in newspapers is rife with discussions of crisis. See Sen (2005), Sainath (2006), National Planning Commission (2001), G. Das (2006) among many others. ² Transparency International (2005), Chaudhury et al, (2006a, b), Das and Hammer, 2006)

³ At least one quarter of hospitalized Indians fall below poverty line because of hospital expenses.

In the specific context of the health sector, a decentralized institutional structure that emphasizes a bottom up, participatory approach can indeed help to redress some of the key failings in the sector such as absenteeism and corruption by strengthening accountability. As Dr. Jaiprakash Narayan, member of the National Advisory Council has put it: "The struggle for better health, the fight for accountable democracy, the quest for peoples' sovereignty and the urge for best value for public money spent are all inseparable." ⁴ Given GoIs renewed emphasis on decentralization, this paper aims to analyze the specific role that decentralization can play in strengthening accountability in the public delivery of health care and offers some suggestions at how best this may be achieved.

The paper is structured as follows: Section I begins with some prefatory remarks setting the context for discussion of health, health care and health policy in India, which is necessary to understand the role that decentralized decision making can play. To make the policy options concrete we briefly review two broad categories of health policy; Section II addresses the problem from the view of standard economic analysis; Section III adds the perspective offered by the World Development Report on service delivery (WDR 2004)⁵ which looks at government performance and capacity through the lens of accountability; Section IV adds the further consideration of decentralization, that is, which level of government is best positioned to achieve that accountability for different types of services and alternative ways to deliver them; and finally Section V explores the potential of PRIs to contribute to current efforts planned by government such as the National Rural Health Mission.

⁴ "NRHM and Local Governments," NRHM newsletter

⁵ "Making services work," World Bank (2003)

The arguments in this paper concerning the roles of local governments in health will take quite a few pages to develop. Therefore, before addressing the issues that are specific to local governments, there are a few basic characteristics of health that we feel, need to be made clear as background. Most will appear in greater detail in subsequent sections but some need to be kept in mind from the start.

First, a distinction must be made between **health status versus publicly provided health services**. The list of determinants of people's health status is long and varied. Most of them are outside the purview of health policy altogether, as normally understood, such as income (whose direct effect is felt through nutrition – both quantity and quality of food, housing conditions, clean water, etc.) and education (whose direct effect is through knowledge of nutrition, basic hygiene and the need for preventive services such as immunizations among others). Because of the multi-sectoral determinants, achieving better health will require strategies that range well beyond health policies proper and involve a wide range of service providers – from engineers, teachers, designers of roads and traffic flow as well as medical workers.

When decision making to achieve better health is discussed, it must be seen within the context of making broad choices across this variety of inputs and goals within a government's budget. When *decentralized* decision making is discussed, it must recognize local variation in priorities placed on these wide ranging options – priorities formed by differing preferences and differing physical or environmental circumstances. The answer to the question "Do we want more accessible and higher quality health care or do we want more accessible and cleaner water?" can vary substantially between communities even if the goal is restricted to health.⁶ How large a community is relevant for this decision?

Second, even health policies that are narrowly restricted to those normally within the purview of health ministries are also very varied. The basic distinction (partly arbitrary) is between **public health versus publicly provided health care**. We discuss this in more detail below but public interventions range from public health engineering such as swamp drainage and spraying for mosquitoes, water supplies and sanitation, health education (to substitute for deficiencies of general education mentioned above), subsidies to and active promotion of preventive health care measures such as immunization, inexpensive curative care and hospital-based (expensive) care. Again, the range of service providers is varied – from engineers to medical workers of all kinds: village health workers to specialized medical doctors. Again, when decentralized decision making is discussed local variation in priorities should be kept in mind.

The third distinction is between **publicly provided health care and all health care**. Health care in India is <u>overwhelmingly</u> private. Most recent estimates are that 85% of all visits for health care are to private practitioners. Even among the poorest people in rural areas, the majority of visits are to the private sector. The quality of these services range from abysmally low (quacks and other informal providers) to much better than in the public sector. When provision or financing of health care is discussed as a public policy, it is essential to know what the consequences of changes in public provision may have on total provision

⁶ Also essential to intelligent discussions of public policy and decentralization, but left aside (or, at least, left to this footnote) in this paper in order to avoid what some would mistakenly consider a red-herring, is the recognition that with a tight budget constraint – as faces all people and all governments in India – tough decisions need to be made between health as a goal and all of the myriad other basic human needs of poor people. Food security, housing, education, water, provision for old age, access to markets via roads or communication networks – the list is endless – all need to come from a common budget whether they have anything to do with health or not. Again, the extent to which these other needs vary across location is an essential factor in determining the scope and nature of decentralized government. The arguments in this paper are made under the self-imposed handicap of restricting them to furthering solely the goal of health and health related concerns.

of health services – the contribution of extra public provision must be assessed net of displacement or any other impact whether positive or negative on the **much larger private sector**. This impact also varies substantially by location and public policy at all levels of government needs to keep this in mind. Appropriate decisions by government will differ substantially as a result.

Fourth and finally is one distinction that cannot be emphasized enough: between **providers paid by salary versus payments for services rendered.** This is partly related to public versus private provision since all private providers are paid only for their services. But even within a publicly financed system and even when medical staff who are civil servants, the general principle in health systems management, health economics and the practice of *every* rich country⁷ is that "money must follow the patient". Decision making as to which provider is chosen, at least at the level of primary care, is done by the patient and not a government at all. The provider is paid by the number of patients they attract (either by visit or through "capitation" systems in which patients sign up for specific providers or fees for specific services) and not via salary.

Box 1.2: Western European Countries Experience with "Money Follows the Patient"

The solution that the richer countries converged on was not simply a matter of chance or historical circumstance. Many of the Western European countries nationalized health provision and did pay input-based budgets and salaries to doctors in the 1960's and 1970's. By the late 1980's, dissatisfaction with these systems led them to switch to activity-based payment systems for hospitals and return to performance-based incentives for primary care physicians that encouraged better treatment (clinically and courteously). It was through bad experience with payments via input based budgets – equipment and personnel - that these systems have come to pay for services instead.

Source: Shieber et al (1991).

The main reason for delegating the role of provider choice to very local levels is that people who can monitor and judge performance (at least on such basic job requirements as attendance at work) must be very close to the actual transaction – usually the individual clients themselves. The Indian system of paying doctors and other health care providers with salaries, and from a level of government far removed from the point of service at that, is an anomaly that stands in the way of any meaningful improvement in publicly provided health care.⁸ By default much of the health care system **does** abide by the principle of money following patients but only because of the overwhelming and growing share of the private sector in ambulatory care.

Therefore, when decentralization is discussed, it must be in the context of how providers get paid and whether the responsible government has the ability to tie pay to performance. Given political realities, the scope for this change might be tightly circumscribed. But in this case, expectations for the performance of publicly provided health care must be quite modest. Improvements are possible in principle but require substantial supplementary requirements to make salaried employment function – usually close monitoring, again by someone close to the transaction.⁹ In the context of health **care**, the discussion of the

⁷ The very few exceptions are, themselves, very illuminating. For example, Swedish doctors are employees of **local** governments.

⁸ The anomaly is with respect to rich countries with at least vaguely well functioning health care systems. The vast majority of poor countries do pay providers with salaries. This may go a long way in explaining the absence of any connection, across countries, between increased health expenditures and improved health (Filmer and Pritchett, 2002; Filmer et al 2000).

⁹ Many analyses of decentralization in health miss this point entirely and compare decentralized and centralized systems in which the basic structure of the incentive systems is left unchanged (surveyed by, among many others, Mosca (2005)). Whether a salaried and largely unmonitored employee is paid by the Government of India

three "f's" (funds, functions, functionaries) associated with assigning responsibilities to levels of government must recognize that in almost all well performing health systems, funds (whether public or private) are directly given to functionaries on the basis of individual choice to perform the functions they – the individuals – want. That is, regardless of the ultimate source of funds – tax receipts from different sources or levels of government, out of pocket payments or insurance – decisions on functions and functionaries are decentralized to a level smaller than the smallest level of government, i.e., the individual.

Given these core principles as background, we take a closer look at major categories of health policy. We then analyze them under a series of realistic assumptions for guiding government policy.

Defining broad categories of health services:

Health services cover a wide range of activities, some whose provision must be guaranteed by the public sector, some of which are open to a wider set of options. We classify publicly provided health services into two main categories:

- 1. Traditional public health which can be further classified as:
 - a. *Population based public health interventions*: These include large scale activities like vector (pest) control (e.g. draining swamps and spraying for mosquitoes), water supply and urban sanitation. An important activity in this group is the systematic collection and dissemination of information about the population's health status. These range from quick-response surveillance activities as well as regular and routine collection of information on health status to research its causes.
 - b. *Preventive and promotive public health interventions*: These include periodic services (not necessarily in fixed locations) such as person-to-person Information, Education and Communication (IEC) activities, health awareness campaigns, immunizations and monitoring of child nutrition. These can be and often are carried out by paramedics, nurses, specialized health educators and related professionals.
 - 2. **Curative services** which can also be further classified as:
 - a. *Ambulatory care*: This includes routine, relatively cheap services alongside a large, if heterogeneous in quality, private sector. This also includes some "secondary prevention" activities, like identifying tuberculosis.
 - b. Hospital care: For "catastrophic" (financially) illness.

(responsible for a billion people), a state government (averaging 40-50 million) or district (averaging 2 million) should make no difference at all.

The conventional way that economists approach public policy is to identify the specific systematic reasons why an unfettered free and competitive market will not allocate resources efficiently in any given market. These are called "market failures", which in principle justify government intervention and usually imply a particular set of appropriate interventions. Implicit in this approach is that if such a market failure is discovered, government should step in.

In section III we examine ways in which governments are also subject to some systematic limitations – "government failures" - and the problem becomes one of *balancing one kind of failure against another*. A market failure becomes a necessary but not sufficient reason to intervene. However, in this section we stick to enumerating the market failures. The typology of these failures is well known and does not really need rehearsal here, but in order to understand the relative damage each might cause in the health sector, we include them in Appendix I.

In reality, there is no such thing as a perfect market. Therefore, with limited resources (financial, administrative or otherwise), it is a good idea to identify those market failures which are likely to lead to the greatest reduction in the well-being (welfare) of the public. Which ones are endemic characteristics of the health sector and point to areas of high priority?

The two clear, characteristic and virtually universal¹⁰ market failures in health are the large externalities associated with communicable disease control and the universal failure of insurance markets due to asymmetric information. However each of our four categories of health services is subject to some degree of market failure. Based on this we discuss how setting priorities in health vary by each category.

Population based, public health interventions:

Most of these interventions directly address communicable diseases and some are as close to pure public goods as we ever see in the real world. Large scale vector control such as draining swamps as breeding grounds for mosquitoes, river basin-wide elimination of snails (for schistosomiasis), worms and larvae of other vectors as well as urban sanitation (in the form of sewage transport and treatment) are the best examples. Some mass media campaigns fit this category as well (though see below). Included in this category is the systematic collection and analysis of data on disease patterns and potential causal factors. Pure research is often considered a public good and a deeper understanding of causality in health is an important aspect of guiding public policy. We discuss this in greater detail in subsequent sections. All of these interventions rank high on efficiency grounds alone.

Preventive and promotive public health interventions:

Many activities in this category are directed at communicable diseases such as immunizations, health education and other preventive or promotive activities¹¹. These activities confer external benefits – the more children immunized, the fewer *other* children are likely to get a disease though the main protective benefits accrue to the immunized child. Better hygienic habits reduce the chance of illness of the person following them but they also reduce the transmission of water and airborne diseases to *other* people. One important role is ensuring the follow-up to treatment of tuberculosis (its identification requires contact

 $^{^{10}}$ So universal, in fact, that they are not noticed in rich countries – people take them for granted because they have already been addressed.

¹¹ although prevention may be directed at non-communicable disease as well.

with medical personnel). Tuberculosis is a particularly virulent disease and estimates are that each case that is successfully treated prevents, on average, one case of the disease in an*other* person.¹² It is the effect on the *other* people that underscores the role that someone other than the person who is ill (usually government) has to play to achieve appropriate levels of control of communicable disease.

We separate this category from the population based interventions, which may seem an arbitrary distinction, mostly because of the difference in the nature of policy measures and personnel needed. These activities work best with face-to-face contact between provider and client. Substantial research shows that personal contact and discussions among peers (usually women) transmits information more effectively than mass media. And, of course, measuring the growth of children and either giving or encouraging immunizations is a person-to-person service.

For both of the public health interventions, again, communicable disease control, especially in the extreme case of epidemics involve externalities in the form of potential spillovers and should be a high priority for public engagement on efficiency grounds alone. However, communicable disease control ranks highly on <u>equity</u> grounds as well. Figure 2.1 shows the prevalence of three ailments across income groups in India based on the National Family Health Service (NFHS): malaria, tuberculosis and blindness (largely due to cataracts but also to diabetes which Indians seem to have a genetic predisposition towards)¹³. While poor people suffer from almost all illnesses more than do rich people, it is the *disproportionate* prevalence that is relevant for determining who benefits from policy.

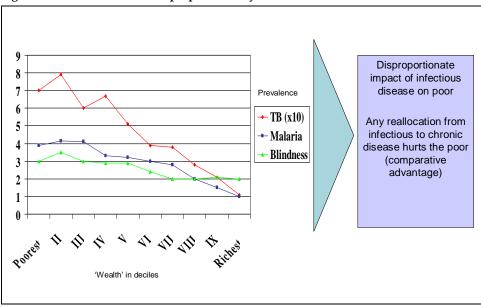


Figure 2.1: The Poor Suffer Disproportionately from Infectious Disease

Indeed any reallocation of resources from communicable disease to non-communicable disease within a given budget hurts the poor. Even though it is the case that poor people may suffer from non-communicable disease more than they do from communicable disease, it is the relative prevalence *across income groups* that drives this crucial result.¹⁴ Box 2.1 illustrates this point.

¹² Murray (1993)

¹³ The Hindu, Thursday May 4, 2006

¹⁴ This is a critical and often misunderstood point. The elementary arithmetic for why this is true is presented in World Bank (1998). The hypothesis could even be put forth that in public information campaigns, particularly where the germ theory of disease is not completely understood, the risk of sending confusing messages on lifestyle, diet,

Box 2.1: Illustration of the Importance of the Relative Burden of Disease

Assume the government can prevent either of two diseases of comparable severity. Also assume the government cannot distinguish between people who benefit from either program on the basis of their income, so that everyone who would have gotten the same disease has the same chance of benefiting from the prevention program. Cases attributable to these diseases per 1,000 population are as follows:

	Disease A	Disease B
Poor	7	21
Rich	1	14

Note that disease B affects more poor people than does disease A and disease B affects more poor people than it does rich people.

If the health authorities want to use their public spending to help the poor to the greatest extent possible, how should they allocate it between the different diseases? When public funds are spent on preventing disease B (the one with the greater burden on the poor), 60 percent of beneficiaries would be poor since [21/(21+14)=0.6]. When funds are spent on preventing disease A, however, 87.5 percent [7/(7+1)=0.875] of the beneficiaries are poor. Therefore, even though the poor suffer more from disease B than A and also suffer from disease B more than do the rich, concentrating public spending on preventing disease A is a more progressive way of spending public money.

Source: Reducing Poverty in India: Options for more effective public services, World Bank (1998).

Curative services - Ambulatory care:

There is a large private sector in India so it cannot be a "public good" in the standard economic sense. The estimates for the size of the private sector vary substantially (depending on definition by cost or visits, by data source and by assumptions made by various researchers) but the best estimates from the 52^{nd} round of the National Sample Survey (NSS) show a very high proportion of people visiting private providers. Figure 2.2 highlights the fact that in primary care, the use of the private sector is dominant among the poor as much as the rich in both states as well as the All – India case.

The market failures associated with relatively inexpensive, routine care are generally quite subtle. One that has often been attributed to it is the phenomenon of "supplier induced demand" in which the asymmetry of information – doctors know more than patients about their illness (though see below) – leads the latter to give more care than is needed or that would be wanted by patients if they understood as much as the doctor. The importance of this as a market failure is controversial in the developed world. In most places in the developing world, it is almost certainly an unimportant factor since the manifestation is too much care in places where the main concern is too small.

etc.. could undercut the effect of combating communicable disease. In this case even public goods may be low priority if their impact on the effectiveness on pro-poor public goods is strong enough. This is an empirical (and untested) question.

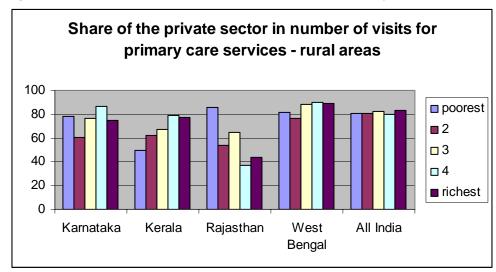


Figure 2.2: Share of the Private Sector in Number of Visits for Primary Care Services – Rural Areas

However, in India, at least in urban areas, there is a distinct tendency to overmedicate in the private sector. Box 2.2 illustrates the point. Whether this reflects a market failure or not is debatable. In the conversation it became clear that it was the <u>patient</u> that demanded the extra service, not the doctor. The doctor, who happens to be a "quack" in the sense of not having an MBBS¹⁵ degree, was fully aware of the World Health Organization (WHO) recommendations and sounded willing to follow them. In a sense, the doctor was *too* responsive to the patient's demand¹⁶. Overall ignorance and knowledge of what constitutes proper care seems to be a problem, but as a policy measure, this would fall in the category of public health education.

On the other hand, there is substantial evidence of overmedication¹⁷ (and sometimes outright harmful treatment) in the private sector as well as a wide consensus that a significant fraction of this is supplier induced. So, the problem must be taken more seriously in India than elsewhere. Even with this evidence, though, the welfare loss due to the efficiency-related market failures in the primary care sector is very difficult to pin down. In rural areas where the practitioner, even if unqualified, may be part of the community having to live with the consequences of actions could limit truly dangerous practices that the provider knows to be dangerous.¹⁸ The problem could be much worse in urban areas with a weaker sense of responsibility since the "community" is hard to define. In any case, the welfare loss of market failure is likely to be limited by the fact that at least there is a market in the absence of government action.

¹⁵ Bachelor of Medicine and a Bachelor of Surgery

¹⁶ Das and Hammer (2005)

¹⁷ Ibid., Phadke (2000)

¹⁸ Dulleck and Kerschbamer (2006) specify conditions under which "credence goods" like medicine where the customer has to have some trust (credence) in the seller, will lead to larger or smaller welfare losses from market failure.

Box 2.2: The Private Sector has a Distinct Tendency to Overmedicate

Dr. S: "Yes, there is a lot of diarrhea and dysentery in this locality – what can they do as well? The water is dirty and people do not know to boil it – that's why their children are always falling sick"

DAS: "so, what do you do for children with diarrhea?"

Dr. S: "What can we do? The usual things --- we tell the mother to give water with salt and sugar to the baby and then also give some medicines"

DAS: "Such as?"

Dr. S: "The usual – metrogyl (metronidazole), loperamide (an anticholinergic), furoxone (furazolidone)."

DAS: "But isn't ORS enough?"

Dr. S: "Of course, the WHO and others keep saying that we should only give ORS. But if I tell the mother that she should go home and only give the child water with salt and sugar, she will never come back to me; she will only go to the next doctor who will give her all the medicines and then she will think that he is better than me."

Source: Das and Hammer (2005)

On equity grounds, however, there is more that could be said for public support for ambulatory care. A priori, as discussed above, medical care has a high income elasticity and is not, therefore, a natural candidate for a general subsidy. However, if poor people can be accurately distinguished from other people, then services can be disproportionately given to them. Of course, if they can be identified, there might be any number of ways they can be helped and whether health care is the easiest or most efficient means of doing it is an empirical matter. The distributional impact of health care subsidies will be discussed in the context of governmental effectiveness. Ambulatory care may also be a case of "specific egalitarianism" as expressed by people wanting to achieve the Millenium Development Goals (MDGs)¹⁹. But the case is not clear.

Curative services - Hospital care:

While given short shrift in the international public health community since the Alma Ata conference in 1977, hospital care may be a reasonably efficient (perhaps the only practical way) to address the second characteristic market failure in the health sector: the systematic breakdown of the health insurance market.

Box 2.3: Health Insurance Markets Always Fail

This is the reason why almost all rich countries have found it necessary to have government assume the insurance function. The following three inherent features of health care are responsible for this market failure:

- 1. *Adverse selection*: when insurance purchases are voluntary, the sickest people will buy policies, driving the price up for everyone else and driving the healthier among them out of the market. This further raises costs, prices and the tendency for healthy people to stop buying coverage a process that can lead to an unraveling of the entire market.
- 2. *Inadequate monitoring*: The adverse selection problem is exacerbated by the difficulty of a "third party" i.e., the insurance company to observe whether treatments given are necessary and, since it is free to the consumer and profitable for the provider to increase the intensity of treatment, costs rise faster still.
- 3. *Moral hazard*: whereby the very existence of the insurance leads people to take fewer precautions to prevent illness than they would if they had to bear the cost of the treatment. An example would be not exercising to reduce blood pressure when (costly) medicines to control the problem are available and covered by insurance. This adds to overall costs but is probably less of a problem than the adverse selection and monitoring problems.

¹⁹ For discussion of a moral question related to treating people as means of achieving favorable statistics while overriding their own preferences as ends in themselves, see "Ends and Means in Public Health Care" Hammer and Berman (1995).

In the absence of insurance, this leaves almost everyone exposed to catastrophic loss of income if treatment is sought for expensive-to-treat illnesses. "Expensive" is a relative term and refers to the size of the financial burden that out-of-pocket expenditures impose due to the lack of health insurance. But no one sells assets to pay for ambulatory care – it is only hospital bills that poor people express fear of. Since public health insurance programs are notoriously difficult to administer, public support for hospital care may be justified on efficiency grounds as a "second best" solution. Universal public insurance often turns out to be too difficult to manage since while universality solves the adverse selection problem, the other two problems plague government schemes just as much as private schemes. Figure 2.3 shows that use of private hospitals is, in fact, lower for everyone than for ambulatory care as illustrated in figure 2.2 above. Further, while Rajasthan showed higher use of primary facilities as income rose, private inpatient care is more prevalent among the relatively better off everywhere. It is just not possible for individuals to pay for expensive services that require hospitalization.

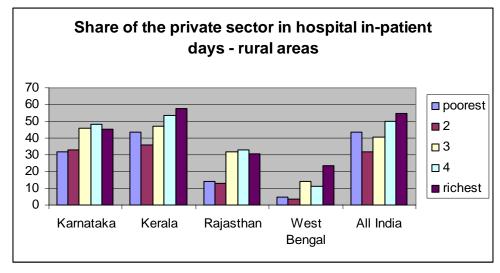


Figure 2.3: Share of the Private Sector in Hospital In-Patient Days-Rural Areas

Referral systems that encourage use of hospitals only when necessary are difficult to design but can increase the efficiency of health expenditures generally. A practical solution could include capped fees in public hospitals. Optimal pricing for insurance is to have a small deductible and a cap on patient's expenditure up to a maximum corresponding to "adequate" treatment and full payment by patients for expenditures beyond that maximum.²⁰ Publicly provided hospital services is a reasonable, second best, option²¹. Hospitalized Indians on an average spend 58% of their total annual expenditure. Over 40% of hospitalized Indians borrow heavily or sell assets to cover expenses. Over 25% of hospitalized Indians fall below poverty line because of hospital expenses.²² This financial burden does not arise from the kinds of health problems treatable at ambulatory care facilities.

On equity grounds, again, if poor people can be identified, they can be provided with services. However, as we discuss below, the use of public hospitals rises substantially with income as is true in virtually every developing country in the world.²³ As a result, we defer this discussion to the next section which outlines constraints on government in making health services progressive.

²⁰ Zeckhauser (1970)

²¹ if the incentive problem discussed in the next section is solved

²² From NRHM mission document

²³ Castro-Leal et al (2000)

To summarize this section, there are *two* key characteristic market failures of the health sector. The first is the *large externalities* associated with communicable disease control whereby too little is spent on genuinely "public" goods. The priority for traditional public health – particularly the face-to-face set of interventions – will become a major factor in our discussion of decentralization in section IV. The second is the *inherent failures of the insurance market* which leaves almost everyone exposed to catastrophic loss of income.

The implicit assumption of the standard, public economics, approach is that once a market failure is identified, the obvious solution is for government to step in and fix it. But as anyone familiar with developing countries in general and India more specifically knows, governments have their own sets of constraints and problems in carrying out their responsibilities. Observers of contemporary Indian polity attribute the continued deterioration of India's public sector to the failure of accountability mechanisms in current governance structures. Much of the public policy literature defines accountability as a relationship in which power holders can be held answerable for their conduct.²⁴

In this section we apply the framework developed in the WDR 2004 to analyze this accountability relationship and how it applies to the health sector. Our argument emphasizes the connection between accountability and incentives that are implicit in institutional arrangements. This, in turn, sets the stage for the discussion of the role that decentralization can play in promoting better health services, areas where it cannot and alternative structures of inter-governmental relations that might provide the required checks and balances which could lead to better outcomes.

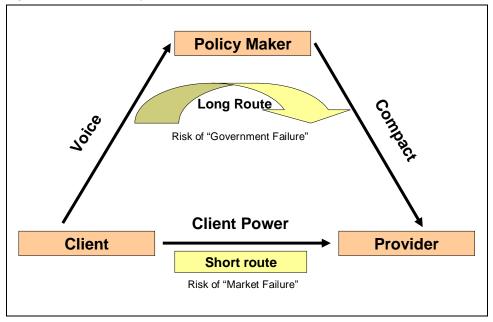
One piece of the logic of the market discussed in the preceding section is almost always left unstated – essentially taken for granted – in standard descriptions of the market in both its strengths and shortcomings. This is that a market transaction isn't as simple as it looks and has implicit in it a natural process of accountability of the provider of a good or a service. A customer goes to a seller, asks for what s/he wants, decides whether what the seller has is worth the money being asked for it (with or without examination or bargaining – depending on what we're talking about), trades money for the item, consumes it, decides whether it was worth the money after all, if it wasn't then might complain to the seller and either gets mollified somehow or refuses to come back again or threatens to tell friends not to patronize this seller. This can all happen in the space of a minute (depending on how long the bargaining takes or how long it takes to decide if the item was worth the money) and the complexity of the transaction gets lost. The essence of the transaction, though, is that the seller is completely accountable to the desires and preferences of the buyer and has every incentive to make sure that those desires are met.

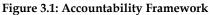
For any of the reasons highlighted in the preceding section or for any other reason, the government may decide to step in and act as an intermediary between the buyer (a patient or people at risk of disease) and the seller (the health worker). Whenever it does so and expects to do better than the market transaction it is replacing, it has to make sure that the provider has the same or better incentive to satisfy the needs and desires (the demand) of the client. For a government, this means that two steps are necessary for providers to satisfy consumers.

First, the government (the policy maker) has to have a clear understanding of what the citizenry wants. In particular, the poor - especially if the reason the government has stepped in is for improving equity. Second, the policy maker must be able to transmit these demands to the actual provider of services and to make sure that the incentives for these providers are aligned with the ultimate preferences or well-being, of the citizens. The minister of health does not personally give vaccinations. S/he sets up rules, personnel policies, issues directives, payment and management systems, etc., to have these vaccinations done. The vaccinations themselves are given by real people with real constraints and preferences of their own. The trick is to ensure that the incentives to the provider continue to reflect citizens' interests.

²⁴ Goetz, and Gaventa, J (2001) Goetz and Jenkins (2004); and Newell and Bellour. (2002)

This two step process and its comparison with the direct transaction through a market was the essence of the WDR 2004 approach to accountability. It is illustrated in figure 3.1. In this picture, lines of accountability are illustrated for the two ways to make sure that services are delivered. Services, of course, go from provider to clients/citizens. But the accountability mechanisms to ensure these services get delivered can go in one of two ways: directly to the provider as in a market or through the state (the policy-maker in the diagram). We call these the "short-route" and the "long-route" of accountability respectively.



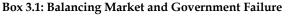


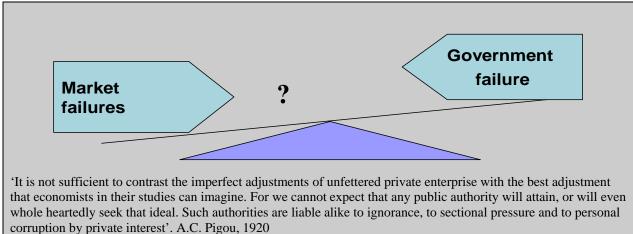
Failures of service delivery are seen as failures of accountability. Market failures in this picture are the problems or risks with the "short route" of accountability. Government failures are problems with the "long route". There are two classes of government failures. The first are those associated with the policy maker not succeeding in hearing or taking cognizance of what people – particularly poor people - want. We call this "voice" in the diagram though we could equally well call it "politics". It does not work well if policy makers – elected officials or the higher levels of the administrative bureaucracy – are not accountable to the citizens.

The second assumes that policy makers "have their hearts in the right place" in the sense of wanting to transmit the wishes of the people to the providers of services. The accountability of providers to policy-makers is called the "compact" in the diagram. We refrain from calling it a "contract" though it has many of the same features, because it can take a number of forms that are less explicit agreements. When working properly, the compact creates incentives such that the providers accurately and conscientiously follow the wishes of the policy makers, who, in turn, accurately reflect the wishes of their constituents. Government failures associated with the compact are due to policy makers not being able to create these incentives and the provider again fails to satisfy clients/citizens wishes.

This framework helps us do several things. First, it helps set priorities for government interventions. If both the market and the government are subject to their respective failures, we have to weigh the advantages of one versus the other – given that neither is perfect. If the market failure is not "too bad" and the difficulty in correcting it is, then that activity would be a low priority for intervention (say, changing peoples eating habits to eat more green vegetables). Where market failures seriously outweigh

government failures it indicates a high priority policy as in draining swamps to eradicate malaria. In this case a genuine public good (in which there is a total failure of the market) will outweigh even serious problems of public delivery because there is simply no alternative.





The need for this "balancing act" was well expressed by Professor A.C. Pigou, the originator of the idea corrective taxes to deal with market failures (Box 3.1). Even he was a bit skeptical of the ability to implement his ideas and identified both voice (sectional pressure) and compact (corruption by private interest) as obstacles.

Our framework also has a second function: it helps to identify where the government services are going wrong and pinpoints where changes need to be made. We can then decide whether it is easier to fix the market failure or the government failure. Improving policies where the government is clearly the appropriate route means assuring accountability along both legs of the long route. One place this argument is obviously leading, though, is that the ability to monitor the performance of whomever is being held accountable, depends crucially on being able to observe, judge and interact with them. The closer one is to the problem, then, a priori, the more likely one is to see it. This gives a head start to decentralization in many areas, though in health policy there are many complications. How do these possible problems of the "long route" of accountability play out in the health sector?

The short route is the default, private market, option but as we shall see later, it can also be used as a policy instrument by government to take advantage of the client's ability to monitor the provider if it is better than government's own systems.

The "Voice" in Health Policy

For a variety of reasons, health often loses out to other demands on public resources. This has implications both for the overall health budget as well as for the composition of expenditures within that budget. The problem of generating sufficient overall resources has been addressed by several commentators but one main issue has been that while education, for example, has gained acceptance as an important factor in the overall development of the country, health has not.²⁵ Therefore, there is more

²⁵ Kiefer and Khemani (2003)

willingness on the part of elites to support education and other "development" expenditures than there is for health.

Health has frequently been called as a "merit" good, i.e. is deserving of more funding than is justified even by efficiency and equity arguments. However, the status of "merit" good is determined by the political process, particularly in a democracy. The degree to which something should be supported beyond the level justified by standard economic arguments is a political decision. Many commentators have noted that India spends much less of its government budget on health than many other countries in the region and at comparable levels of income.²⁶ This does not bear the markings of a "merit good". Outsiders can't tell governments that certain goods are "merit" goods – that is something that the society as a whole has consensus on and is expressed through political mechanisms. Indeed, there seems to be little evidence that outside of empty rhetorical statements and the interests of health ministries, health as a whole is a high priority of the national and, particularly, state governments who control virtually the whole of the health budget. It is possible that people would prefer more action on health from the public sector but this cannot be inferred from the behavior of State governments.

The accountability and incentive aspect of the problem in health has also not escaped notice in public discussion. Many argue that accountability mechanisms are weak primarily due to the presence of perverse incentives within the administrative and political system that encourage patron-client relationships. The dynamics of this relationship results in bureaucrats and politicians being accountable, internally or upwards to their individual patrons rather than externally to the needs of citizens.²⁷ In the absence of accountability mechanisms, the poor are unable to interact, influence or exercise enforceability upon the State (outside of electoral politics). Thus when there is dissatisfaction with and complaints about government health programs, the poor have no recourse.

Within the sector, political concerns may go quite far in explaining the actual allocation of funds. The factors determining the political incentives are not at always the same as those that determine the economic or health priorities across different policy options. We now look at how this applies in our health categories:

Traditional public health (of both kinds):

This is one area where there is a clear conflict in the allocation of resources to preventive/promotive public health activities, whether population based or face-to-face. While this is essential from a technical (equity and externalities) point of view, it is quite difficult to garner political support. For example, if mosquitoes have been successfully handled by a government and people do not fall sick as much, it is not clear that people will recognize the *absence* of illness as a result of a government policy. They may not even have seen the people who administered the larvacide (to kill mosquitoes before they hatch) in nearby ponds and streams. Therefore, it is harder for politicians to take credit for successfully adopting public health measures whereas they can be at the official opening of a physical facility. The WDR 2004 argues that "health status" is much harder to take credit for than clearly observable inputs, like buildings.²⁸

One specific kind of public good that could help policy makers themselves but that can also improve the "voice" leg of accountability is the systematic collection and dissemination of data concerning the causes and effects of health policy. We discuss this in more detail below.

²⁷ See for instance: Saxena,N.C. (2004), Mehta,P.B. (2003),

²⁸ There can certainly be exceptions to this general observation depending on the awareness of citizens on the causes of disease and how observable are changes in its prevalence. A good example is that Italian fascists gained enormous political support from successfully eradicating malaria.

Curative services – Ambulatory care:

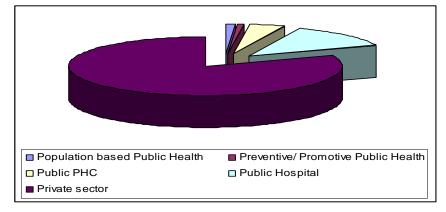
Curative care is individual specific (it is a "private" good) and can be attributed by the client to a specific government service. However, because the private sector is so large and is used more by the relatively well-off than the poor (as in figure 2.2) there is always an alternative to the public sector and a systematic reason for there being less pressure to improve the functioning of the latter. Studies find that substitution with the private sector mitigates the net increase of medical care consumption from public provision.²⁹

Curative services - Hospital care:

Firstly, large facilities are more prominent than small ones. Political figures can take more credit (sometimes with their name attached to the facility) for opening hospitals than for opening primary health care centers or sub-centers. Secondly, it is much easier to take credit for the construction of facilities than for its successful functioning.³⁰ The former is visible and can be accompanied by a single visit from the politician of the area, the latter is harder to attribute to any one person since it is part of a system and depends on lots of different actors on a continual basis.

This failure in "voice" results in a *misallocation of resources* whereby too little is spent on genuinely public goods such as communicable disease control by traditional public health measures such as vector control, sanitation, hygiene education and the like. While exact estimates are hard to find due to differences in definition, the best guess is that 5% of public money goes to traditional public health activities while, until very recent efforts, almost nothing has gone to disease surveillance - despite the fact that reallocation away from infectious disease control towards non-communicable disease control hurts the poor (see figure 2.1 and box 2.1).

Figure 3.2: Relative Allocation in Health Sector - All India

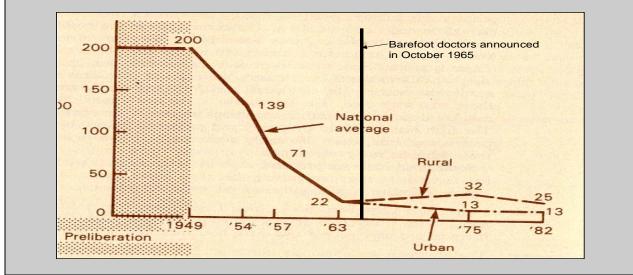


²⁹ Filmer et al (200)

³⁰ World Bank (2003)

Box 3.2: The Gains of Action on Public Health in China

China made enormous gains in health status in the period between the revolution of 1949 and the mid-1960s. This achievement of very low levels for a very poor country occurred entirely because of action on public health. Vector control and widespread facilities for sanitation were put in place in the 1950s and early 1960s. The famous "barefoot doctors" (the inspiration for WHO's support of Ambulatory care and the Indian government's support of Ayurvedic medicine and other forms of inexpensive care) came after the gains in health care were already more or less achieved. When the system of barefoot doctors was abandoned in 1978, there was no noticeable increase in mortality. The graph below shows IMR rates in China from 1949-82.

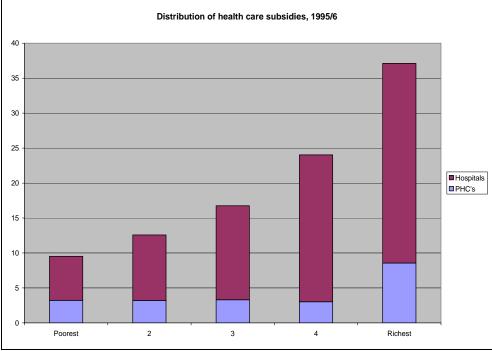


Source: WC Hsiao (1984)

As discussed above, government commitment to helping the poor with the use of the health budget is dubious. Beyond the fact that so little money is spent on combating infectious disease generally, the beneficiaries of health care are disproportionately among the better – off groups in society. Figure 3.3 shows the distribution of beneficiaries of health care subsidies primarily³¹ based on the 52^{nd} round of the NSS data. This figure shows that the large majority of the curative health care budget benefits the top forty percent of the population with the top twenty percent receiving more than 35% alone. This is difficult to reconcile with a health policy justified on the basis of its benefits to poor people.

³¹ The "primarily" part is due to the analysis of Mahal et al based on the usage of different health units. Their calculation of the total cost of PHC's was arbitrarily cut by 40% since the per-visit costs were so high they felt it unrealistic to call this a "benefit". This figure incorporates "rents" to providers based on absentee rates in Chaudhury et al (2006a) and discussed below.

Figure 3.3: Subsidies for Curative Care Help the Rich



Source: Mahal et al (2001) and Chaudhury et al (2006a)

Therefore, it is hard to "break into" the voice leg of accountability, particularly for outsiders since this is so intimately bound up with politics. However, there is one service that governments can provide by which it may actually improve its own performance. This is in the regular, *large scale and multi-purpose collection of data* – a true public good. The "multi-purpose" nature of data collection can help determine causal factors related to government policies and health. We defer discussion of this to the "compact" section.

Data that is extensive enough and frequent enough to show differences (and changes) in health inputs and expenditures as well as health status at a small enough geographical level for someone to feel responsible for improving these indicators can serve two important purposes. First, it may generate political pressures for improved policy making as people come to see how their own progress compared to that of their neighbors. One example of the power of information is the experience of the citizen score cards used by Public Affairs Center in Bangalore which has been collecting information on peoples' satisfaction with a variety of services, making this information public and generating either political efforts or just public accountability (by avoiding embarrassment) to improve services.³² Second, whether this information translates into a direct improvement in services or not, India is a democracy and people are entitled to know what is spent in their name and with what effect.³³

³² Public Affairs Center (2005)

³³ There are some risks to this and such data should emphasize the changes in health status or health expenditures that a local area experiences. When district level Human Development Indices were first (meaning levels were reported but not changes) introduced in Maharashtra, for example, government was besieged by low scoring areas as a way of lobbying for more money. This accountability should go both ways, however. In the second year – if such information were available – it might be that the state government could turn around and ask: how come the extra money we gave you last year didn't lead to any improvement? (interview with former District Collector, Thane).

The "Compact" in Health Policy

The above discussion raises some doubts concerning the political support that health – health status, economically high priority interventions and health policy's role in reducing inequities in society - receives from the national and state governments who currently determine the size and composition of health budgets. However, as seen above, even the money currently spent does not appear to be spent well. If peoples' behavior is anything to go by, the health sector is being "privatized" by people voting with their feet. We highlight three important points:

- The public share of **institutional** deliveries of babies fell from 57.3 to 48.2% between 1992 and 1998 (NFHS I, II)
- The public share of **all** deliveries fell between 1998 and 2001 (RCH I, II) as the private sector's share rose from 9.4 to 21.5%
- Pay commission raises of 1997 makes this unlikely to be due to lack of money health ministries are very labor intensive

It is clear that something is going wrong with the money that is being spent. The ability of governments to monitor and to enforce the compact – the second relationship in the long route of accountability between policy maker and the organizational provider - appears to be weak. Problems with the compact mitigate governments' ability to implement health policies successfully. Here, the key constraint is whether the provider is accountable to the policy maker (and, through them, to people) for providing good services. Even if the policy makers are sincerely attempting to act for the good of the people (i.e. strong voice), the difficulty lies in making sure that providers are implementing the intended policies.

Every policy option brings with it its own set of administrative and managerial problems. We discuss them here in terms of our categories of health. A caution is in order though. There is very little empirical evidence on the relative difficulty in implementing policies – in the health sector and otherwise – and these difficulties depend sensitively on the details of programs. The following brings whatever empirical evidence there is to the subject but is necessarily supplemented by anecdote and common sense.

Population based public health interventions:

Many of the policies that fall under this category are "one-shot" or occasionally engineering interventions requiring little management except for short periods. Roads (for better access to qualified practitioners) need maintenance but the main construction is a relatively easy matter. Draining swamps and ground work to prevent their re-appearance are also relatively straightforward and easy to monitor. As policies go, these are likely to be the easies for government to implement.

There are exceptions, particularly when the wrong problem is addressed. An example is the Central Rural Sanitation Program in the 1980's, to construct latrines in every village. Coverage remained low – at less than 20%. In Maharashtra, between 1997 and 2000, 1.7 million toilets were constructed by the government. Many of these structures were used for reasons other than for latrines – 53% by the government's own estimates.³⁴ In this case, the problem was not the absence of infrastructure, it was the lack of understanding of the relationship between sanitation and health. A recent analysis in Maharashtra also notes that ownership of a toilet, by itself, does not eliminate open defecation, again pointing to the need for changed behavior, not just construction. Similar cases come from Kerala and Goa where behavior did change but the fact that latrines need to be kept far away from water supplies was not impressed upon people. So, while it was easy to implement construction, this was not sufficient to get

³⁴ There are cases where the latrine superstructure (built without a pit underneath it), was converted into a puja room since it was the only concrete, "pucca" structure in the village. Water and Sanitation Program (2003).

health effects.³⁵ It needed to be complemented by the second type of public health intervention: health education.

A crucial service is the generation and dissemination of data concerning the inputs, outputs (services delivered) and outcomes (changes in health status and protection against catastrophic financial loss) within the health system. This information has little monetary value to anyone outside of government or academia³⁶ so it will not be collected in the private sector. The value of this information is both in improving public discourse on health as discussed under "voice", but serves several other purposes important to public policy. This sort of data can help determine which public policies are most effective in improving health via statistical analysis. Further, if collected regularly enough and representative of small enough areas, can help hold providers accountable for results.

Summarizing the "balance" of market and government failures in this context, interventions in this health category: 1) fixes serious market failures 2) are highly disproportionately pro-poor and 3) should, in most circumstances, be relatively easy to implement via the compact – either by government departments or direct, easy to monitor, contracts.

Preventive/ Promotive Public Health interventions:

It has been long understood that peoples' behavior is a key factor to health. Hygienic practices of all sorts, making sure children are immunized, boiling of water, breastfeeding, recognizing the need for micronutrients, monitoring growth of children, avoiding dehydration for those suffering from diarrhea, not to mention all of the factors associated with non-communicable "lifestyle" related diseases – again, the list is long. As in the population based interventions, some of these are relatively easy to implement. Immunization campaigns – the most recent successful example being the pulse polio campaign³⁷ – seem to work quite well. It is a commonplace that India can deal with famines but not with day-to-day malnutrition. It is easy to mobilize and monitor specific, well defined policies with measurable outcomes. It is much harder to run systems on a continuous basis.

There have been many experiments, with mixed results, on better or worse ways to implement Information, Education and Communication (IEC) policies and do not need to be reviewed here. The part that is relevant for this discussion is that the health problems for which these interventions work vary substantially across states – dry areas versus wet for example – but more importantly, are often best done by face-to-face contact with continual reinforcement by someone³⁸ trusted by the community.

As far as our inquiry about "balancing" market and government failure is concerned, preventive/ promotive activities: 1) address serious market failures, particularly when directed at communicable disease control, 2) for the same reason, are services that cater disproportionately to the poor but, 3) in contrast to pure public goods of population based interventions, do face more difficulties in the "compact", in making sure the services are provided adequately. Monitoring of provider behavior is not easy. The potential effect of healthier behavior is clear as is the role that government needs to play to encourage it. How to change behavior is a bit harder and is likely very context specific – pointing to the possibility that government performance may be improved by local decision-making.

³⁵ Ahmad et al (2006)

³⁶ Funds for this kind of research in academia are severely limited and the incentives for collecting data and publishing within India academia are weak, indeed. But that's another story.

³⁷ We are deliberately avoiding the controversy over whether the polio campaign interfered with other, perhaps more important epidemiologically, immunizations. The contrast does reinforce the point, though – time bound, clearly defined and therefore easy to monitor interventions are easier to make sure get done by a state-wide program while more complex tasks are more difficult to ensure.

³⁸ Almost always a woman talking to mothers

For both categories our above mentioned categories of traditional public health, it is important to repeat that the fact that government needs to fund and guarantee the provision of a service does not mean it has to do the actual provision of it with civil servants. It is just as possible that contracting out the service could work as well – and there are many instances where Non Governmental Organizations (NGOs) have done a good job at providing the preventive/promotive types of services. A possible reason for favoring NGOs over a private sector if contracting is a preferred option is that many aspects of a service are hard to observe and enforce –and therefore cannot be completely covered in a contract. For services where there is more scope for cutting-corners or otherwise not doing the most conscientious job possible without it being discovered, choosing an NGO with a track record of altruism is a good idea. When contracts are more easily enforced – when outputs or outcomes are easily observed and payment is conditional on successful completion - it makes no difference who does the work. It can be civil servants (subject to the conditions on payment), NGOs or the for-profit private sector.

Curative Services - Ambulatory Care:

The essential problem of curative care is that the public part of the Indian health care system violates a basic premise of health care finance. That is – *money must follow the patient*. With one exception, **no developed country pays public money to primary care providers with salaries.** And while India may be a special case in many regards, this is one area where the logic that guides this policy in the rest of the world applies with full force to India. This is why rich countries (with far greater technical control mechanisms) always allow choice among patients and rules where payments follow patients (see box 1.2).

Even when the health care system is 100% (or nearly so) **financed by government**, most rich countries have 100% (or nearly so) **private providers**. The payments are usually via reimbursements of actual services provided. The main exception is Great Britain where primary care providers are public servants but whose pay is dependent on "capitation", or the system in which payment is based on the number of patients that sign up as clients of doctors. People can change providers if dissatisfied, thereby "voting with one's feet". Even here, recent reforms have made a higher proportion of physician pay dependent on services. This emphasizes that systems in rich countries are continuing to move to more "high-powered" payment structures with income tied to services rendered.

Organizing, monitoring and managing a dispersed set of facilities on a daily basis in rural areas is quite a difficult task. The difficulty is underscored by the common phenomenon of people by-passing free public care to spend money in the private sector. Why is it hard to give these services away for free? We approach this by asking: what is it that people find when they go to a rural, public, Primary Health Center (PHC)?

- First: *Vacancies* in posts leading to inadequate staff. A recent study in India finds that the unweighted average of vacancies to be 18% among doctors, 15% among nurses and 30% among paramedics.³⁹
- Second: *Absenteeism* among medical care providers. Figure 3.4 shows the results of a large scale study of surprise visits to health facilities in all the major states. The first thing to notice is the very high average level of absenteeism for the country as a whole. There are legitimate reasons for being away from posts such as leave or official duty. However, the numbers claimed for being on leave are much higher than are legitimate given leave rules. While the study was primarily for PHCs, the study also found that absenteeism was worst in the smaller sub-centers (for staff that were not supposed to be on home visits), followed by the primary care centers and best for the few Community Health Centers (small hospitals) in the sample.

³⁹ Chaudhury et al (2006b)

Since salaries are paid *regardless* of absences, the total cost of maintaining a PHC system includes both those costs that are legitimately necessary to keep facilities running but also those costs that are received by providers in the form of "rent", that is, payments that do not lead to increased services. The modification of the distributional benefits in the figure below takes into account the full costs of the PHC system inclusive of these rents.

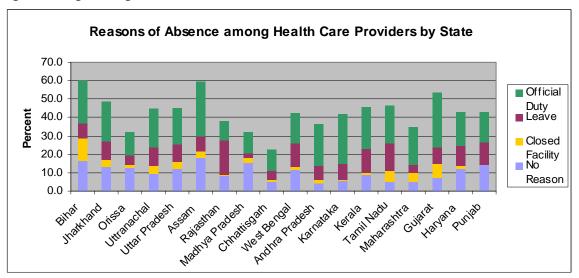


Figure 3.4: High Average Level of Absenteeism in India

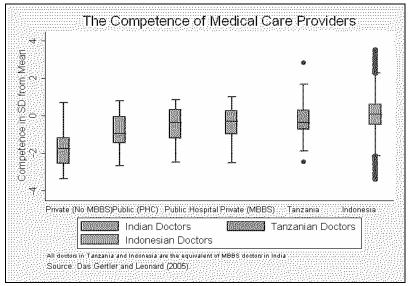
Vacancies and absenteeism reflect that too few health care providers are at their posts when patients demand health care. Exacerbating this general problem is the fact that public facilities are open only when patients have to work. This may seem to be a separate problem from those that are determined by provider behavior, but can be traced to a similar source.

• Third, *inadequate competence* of staff. A recent study on the quality of medical care in Delhi found that competence levels of a public sector MBBS doctor in a PHC were so poor that there was as high as a 50:50 chance of the doctor recommending a positively harmful therapy⁴⁰. In treating diarrhea for instance, a basic health problem that 70 percent of providers report facing "almost every day," the typical provider recommended harmful treatment three-quarters of the time.

Moreover, the study undertook a comparative analysis of competence levels of doctors in Delhi with a national random sample of doctors in Tanzania and in Indonesia of the equivalent of MBBS doctors and found that the typical MBBS doctor in a PHC (not hospitals) in Delhi is *less* qualified than the typical provider in Tanzania and substantially less competent than doctors in Indonesia, and that even hospital-based public sector MBBS doctors only about reach the Tanzanian level—and are still below that of Indonesia (see figure 3.5).

⁴⁰ Das and Hammer (2005)

Figure 3.5: The Competence of Medical Care Providers



- Fourth, *inadequate effort* applied by staff. The study referred to above also examined, through observations, the effort doctors put in their actual clinical practice. The striking thing was that, while the private, non-MBBS providers were not very competent in practice, they did what they knew, while the public MBBS doctors did not. In the hypothetical vignettes used to measure competence, about 30 percent of public sector doctors asked the right questions—but less than 10 percent did so in observed practice. In contrast, private non-MBBS doctors knew to ask the right question only 20 percent of the time, but achieved that same level in practice. This low effort becomes even more striking when the public doctors in PHCs in poorer neighborhoods in the study are examined—there both competence and effort was below even that of non-MBBS doctors—and both were much worse than in rich neighborhoods. The contrast with the private sector is instructive: since private doctors are directly accountable to the patient, they put in effort, although they tend to over prescribe medicines that are ineffective (at best) simply to please the client (see box 2.2).
- Fifth, *discourteous behavior*. Many surveys show that patients are treated much more courteously in private clinics (even if they are staffed by the same public sector workers in their off-duty hours). Again, private providers are directly accountable to the patient and are aware that the choice of a return visit to the provider lies entirely with the patient.
- Sixth, *illegal payments*. Transparency International's report in 2005 measured the monetary values of payments people were required to pay to receive different public services that were supposed to be available for free. Of the seven services covered by the study, health care accounted for the largest single share of money payment at 27% it was ahead of police and judicial services. This has been observed elsewhere. A similar study in nine Eastern European countries found the health field the most common source of demands for bribes (not necessarily taking the most money) at, coincidentally also 27%. These figures underscore a basic truth in economics: if you ration a private good (defined in economists' terms discussed above) by means other than price, you will induce incentives to overcome this ration by requests for money. An interesting difference between India and the results from Eastern Europe is that in India, the second largest source of bribery was the power sector which did not even appear in the other study. Why? The price of electricity is controlled and kept low. Demand is high and demand for fixing connections is high and rationed. Hence, the incentives for bribery are unending. This is the same as in the health sector.

Indeed, all of the problems of delivering health care – particularly primary care – are the results of bad incentives – a particularly bad compact. People may be bypassing public facilities for private for all of the above reasons. But why does this apply to the public and not the private sector? Why might public doctors not be as conscientious as private? One clear explanation is that *their pay does not depend in any way on their being conscientious*. Their performance has little, if anything, to do with their remuneration. When private providers do not show up in their clinics, they do not get paid. When a public provider misses their clinic opening hours, they get their salary, at the public's expense, anyway. If you are paid by salary; not monitored by supervisors; cannot be fired or have pay reduced under any circumstances; have lucrative alternative work in the private sector – what would you do?

Summarizing the "balance" of market and government failure, ambulatory care: 1) is subject to some market failure as manifested in the tendency to over-prescribe drugs (whether instigated by the doctor or the patient is unclear) or otherwise over-treat patients 2) has the potential of being a way of redistributing resources to the poor since rural areas are, indeed, poorer than urban. However, as currently run is not serving this purpose very well and 3) appears to be very difficult to run properly under the set of incentives providers currently face.

Curative Services - Hospital care:

Since hospital services are run in the same way as primary health centers, in the sense that relying on medical professionals paid by salary with high opportunity costs, we might expect the same difficulties in enforcing the "compact" in hospitals as in PHCs as discussed above. However, there are a few differences that work in the favor of hospitals – at least in terms of attendance. First, in a hospital setting, peer monitoring (several people on staff observing other provider's behavior), often leads to better attendance⁴¹ than in smaller facilities. This is particularly true for more junior staff when the senior medical officers are present. Peer monitoring and consultation may also help in the less-easily-observable aspects of medicine such as clinical practice. In addition, it is easier to manage personnel in larger facilities than in dispersed networks. Secondly, a major determinant of attendance is living nearby and hospitals, for obvious reasons, tend to be in towns and cities where upper class people (like physicians) would prefer to live. Third, research in Andhra Pradesh has shown that doctors tend to like to work in settings where they have colleagues to work with as well as equipment and opportunities to use their skills and education – generally speaking: hospitals. Thus larger facilities can rely on better internal motivation from staff to ensure better performance.

Although, as in ambulatory care, there are serious problems based on an incentive system that relies on salaries though in the case of hospitals, this is the organizational equivalent of fixed annual budgets independent of performance.

Summarizing the "balance" of market and government failures in the context of hospital care: 1) hospitals are a plausible "second best" solution in the absence of a functioning universal health insurance program. Such systems are extraordinarily difficult to manage and while it is the likely form of the Indian health care system of the (far) future, universal insurance is an unlikely option. Therefore hospitals ameliorate the serious market failure of insurance and can, potentially, provide protection against financially catastrophic loss to everyone – rich and poor, 2) on equity grounds hospitals are failing the poor miserably with the vast majority of subsidies going to urban residents and 3) subject to the basic problem of payments to providers in the form of salaries but with some advantages over ambulatory care.

In this section we have argued that there are two kinds of government failure that have contributed to the current failures of the health care system in India. These are failures in *voice* and *compact*. Failures in

⁴¹ Chaudhury et al (2006a)

voice have resulted in a misallocation of resources with relatively little being spent on genuinely public goods on the one hand and the top 20% of the population receiving a majority of benefits from health care subsidies for curative services. Failures in the compact are most evident in ambulatory care services where problems of vacancies, absenteeism and corruption are rampant. Fixing government failures requires identifying the level of government where voice and compact is strongest for the given service.

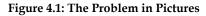
In the previous section we discussed the fact that the government's ability to provide services better than the private sector requires assuring that public employees are accountable to citizens. This, in turn, requires both legs of the long route of accountability to be intact – that policy makers hear and represent the wishes of people – particularly, in rural areas where the majority are poor or near-poor – and that the policy-makers successfully transmit these wishes, through the provision of proper incentives to providers.

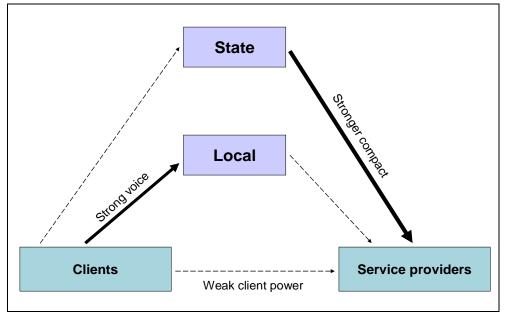
However, how realistic is it that on issues as specific as health services people in villages have "voice" at state government level? If a village were to agree that of all the money that is spent in their name (that is, is supposed to be allocated by state government ministries) more should be spent on safer water this year instead of treating the consequences of unsafe water who would "hear" this? And if the village next door, whose water is, fortunately, of better quality decides the opposite, who would ensure that these preferences be reflected in public policy? The answer under current circumstances is: no one.

The problem is easily illustrated by a modification of figure 3.1 illustrating the basic features of accountability but dividing policy makers into two: state and local (see figure 4.1 below). The problem is clear. Service providers are accountable to state governments as they are employees of state governments. If they are monitored at all it is by state governments, and there career paths are determined by state governments.⁴² State governments have hundreds of responsibilities and the priority given to the differences in needs as they vary village by village is unlikely to be important. This variation in needs won't be important enough to change allocations for them across state line ministries and any one of these hundreds of responsibilities will be important enough to change the electoral prospects of the government. Rhetorically: if a consensus over local priorities in health were reached within a village or Gram Panchayat (GP) in Gulbarga district in Karnataka, what is the likelihood that anyone in Bangalore would hear it? (Zero - That is, unless the Member of Parliament comes from that village).

Where "voice" could be heard and with the nuance of local needs captured is very local. Poor people don't have the time, money or personal status to "talk" to anyone else. Their influence on any one set of service priorities versus another at state level is minimal. Public services will work only if the needs of the people determine the incentives of the service provider. As illustrated below, "voice" is local (for poor people, this is at best) and "compact" is state level. In effect, "voice" goes nowhere.

⁴² Saxena (2004)





India-wide, the diagram overstates local influence. In most places the only line of accountability for service providers is represented by the heavy arrow from the state. How strong can "client power" in health care be if absentee rates are 46%? For that matter, how strong can the compact of local government be? They don't employ, they don't influence payments, at best they can get a transfer (to some other Gram Panchayat) of a public employee employed by the state. In some states (Kerala, for example) people sometimes as a group act to enforce better performance by providers but this is outside of government channels and not embedded in the structural incentives of government employees.⁴³

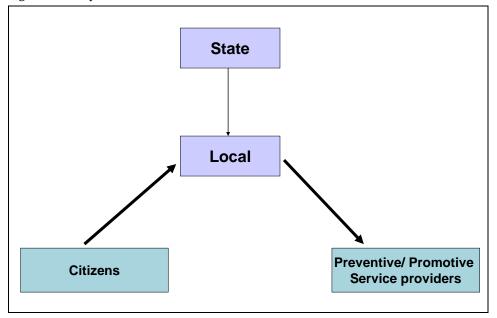
We apologize to the reader that it has taken us this long to get around to the main point but the logic of decentralization is alien to debates over public policy in India and we wanted to build the complete case. Unfortunately, there are more complications that arise when decentralization is raised as a policy option and it is to these complications that we now turn. These are both political and technical and influence the types of services – the four categories of health services – in different ways. These complications require a serious analysis of potential inter-governmental relations. There is a need for checks and balances between levels of government to ensure both efficiency and equity in the delivery of public services.

Limits and Options of Decentralization by Type of Health Service

The simplest characterization of the lines of accountability under decentralization is depicted in figure 4.2. This would correspond to a block grant (plus use of local governments' own resources) to purchase health services directly. The advantage (in the abstract) of this approach is that "voice" and "compact" line up exactly. The local government is in the best position to reflect the needs of people and is also closer to the provider to improve monitoring and to enforce the compact.

⁴³ Some villages have been known to physically intimidate medical personnel, especially doctors, for poor attendance. Perhaps it is not surprising, therefore, that Kerala is the only state in the study of absenteeism where doctor attendance is better than attendance by other categories of personnel. (WDR 2004, Chaudhury et al 2006a).

Figure 4.2: Fully Decentralized Health Services



One further principle – besides having voice and compact passing through the same level of government - is that there be as few lines of accountability as possible. If a provider must cater to contradictory orders on the same set of functions from different levels of government, this will lead to confusion on the part of the provider and undoubtedly worsen service.⁴⁴ We agree that sometimes multiple channels of accountability are unavoidable – there will always be obligations to both professional standards (implicit or explicit as in a board of examiners) as well as to decisions by policy makers. However, these should be complementary in the sense of having separately defined areas of influence to the greatest extent possible. Professional standards (perhaps, but not necessarily, housed in a higher level of government) could be relied upon for purely technical advice and information that could be transmitted to local government officials but the actual setting of local priorities can be a GP responsibility. Box 4.1 below illustrates the problem when levels of government have overlapping, and therefore competing and confusing roles and responsibilities.

Box 4.1: Confusion of roles between governments in providing public goods

Who buys the poison?: One recent example from West Bengal illustrates the problem of the division of responsibilities though not through PRI's but through municipalities. As it turns out, the ultimate decision was made by the appropriate level of government but not before substantial confusion was resolved and with loss of time. In the fall of 2004 the Kolkata Municipal Corporation (KMC) was expecting funding for pesticides to come from the state government for its mosquito control program to combat malaria and dengue fever – particular problems in West Bengal. After a long delay, the KMC ended up buying the pesticides using other funds in hope of re-imbursement. In fact, this is the right solution. As the local government recognized the need for implementation of the program, it should be within its power to act without reliance on higher levels of government. However, the confusion over who was responsible for what aspects of implementation caused unnecessary delays and, likely, unnecessary illnesses (The Statesman, November 23, 2004). A local need should be (and in this case was, albeit late) handled by a local government with the autonomy and authority to act.

⁴⁴ See Holmstrom and Milgrom (1991) for analyses of effort under competing pressures in the abstract and in the context of health care workers, respectively.

Before we begin to look at the limits of decentralization by category of health service, we classify the services by the degree of "discretion" and "transaction intensiveness" in order to determine the degree of difficulty and which tier of government is most suited to do what. Essentially, when discretion varies by region, then the lowest tier of the government should be responsible for performing that activity.

Therefore, activities that are *neither transaction intensive nor very discretionary* are easiest to implement and should be done by higher tiers of government. For services that are *transaction intensive but not discretionary* there is little variation in the services that are needed and higher levels of government may be able to take care of them. However, *discretionary services which are not transaction intensive* (e.g. health education) include policy decisions that vary between geographic areas thus locally employed providers could serve to a greater effect. The hardest services to provide are those that are *both transaction intensive and discretionary*, particularly if discretion is relevant between individuals. This situation completely describes a clinical setting – both types of curative services. In these cases, it is very difficult, even in principle, for hierarchic administrative and control structures to monitor and ensure good performance. In the WDR 2004, a solution to situations where the government cannot monitor staff behavior is to delegate this role to the user. The table below summarizes the above discussion.

	Discretion		
Transaction Intensive	Yes	Yes	No
		Curative care	Immunization
			Health education (via face-to-face visits)
			Distribution of food
			Emergency relief
	No	Vector Control	
		Health education (via media campaigns)	Overall policy & rules
		AIDs	

Table 4.1

Population based public health interventions:

Two characteristics, mostly technical in nature, limit the ability to decentralize several sorts of policies that fall into this category. The first is the problem of "spillover effects" and the second is that of scale. These are governmental equivalents of the market failures of externalities and natural monopoly respectively. Some kinds of public health activities transcend geographical boundaries and either must be coordinated between the political jurisdictions voluntarily or regulated by some higher level of government. Examples would be large scale vector control or any concerted effort at eradication of any one disease. The decisions of one GP, say, may influence the success of a much larger effort and either must be regulated sufficiently to spend its own funds on this larger effort, or, more palatable politically, to have this responsibility given to higher level of government.

On issues of scale: there are certain functions such as research, development of treatment protocols and overall help on decision-making (capacity building) that are much more efficiently done at a higher level of government than GPs, some are even more appropriate for the state or the Government of India. Also, if a GP did want to contribute to the eradication of certain pests, the appropriate scale may be higher – perhaps much higher than the smallest tier of government.

A critical function, with elements both of scale and externality, is the *regular collection of comparable data* across jurisdictions. A core function of higher level governments, State level at least and probably with guidance (in the form of developing standard reporting formats) from the GoI, is to collect data from both households as well as from official budgets and health ministry sources. This will help all GPs, districts and even states to determine the most effective use of their money. No single local government (at any of the three levels of PRIs) would have enough ability (requiring specialized skills) or incentive (the knowledge obtained would benefit other jurisdictions and would be under-funded as people free-ride on others' efforts) to successfully carry out this function.

Box 4.2: How comprehensive data collection can affect the performance of a health system

An interesting case in which the collection of regular, reliable and comprehensive data collection has had a dramatic change on the performance of a health system comes from the Veterans' Administration in the United States. Once considered a dismal failure as a service provider (to veterans of the military services) – a perfect example of our "problem in pictures" – the performance of the system has improved dramatically. Two elements were involved. First, very strong performance contracts were introduced for regional managers of the system (the compact was made extremely effective). But more important was that the contracts depended on regular measurement of health status of the eligible clients, costs of providing various services, satisfaction levels of clients and a host of other indicators that made up the components of the performance contract.

Without this extensive and intensive data collection exercise, the reforms would have failed. With the data, management improved due to much better accountability in the system. But perhaps more importantly, the system generated enormous opportunities for learning what works best in achieving better health status in a real population (as opposed to experimental groups). It allowed for better decisions balancing preventive and curative care and achievement of the outcomes of ultimate importance to clients – better health, greater satisfaction and less expensive but more effective financial protection.

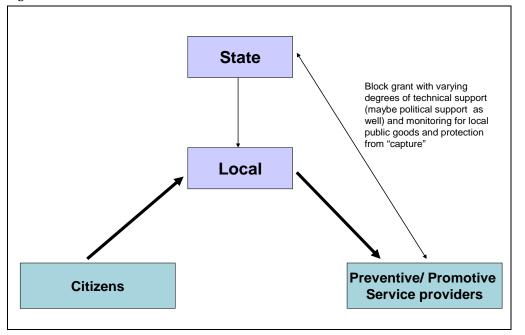
Source: Based on Jha et al (2003)

Preventive and promotive public health interventions:

This is the easiest of the public services to decentralize – certainly for technical reasons as well as for avoiding powerful political objections. Most of these services are face to face – are, in fact, local public goods, and should have providers directly accountable to local needs.

A commonly heard complaint about putting staff such as Auxiliary Nurse and Midwife (ANM), Anganwadi Worker (AWW) and the proposed Accredited Social Health Activist (ASHA) workers under the control of local governments is the risk of political capture by elites in either the form of patronage or other pressures put on such workers. Here is a case where inter-governmental relations need to be clarified and enforced. On the one hand, higher levels of government can monitor the selection process (the stick) and offer advice on how to think about, balance and use local health workers to support the prioritization of health needs of the community (the carrot). From the perspective of the health workers themselves – intergovernmental relations help them appeal to higher levels for protection against undue pressure (the same stick) as well as for receiving technical advice (the same carrot). Figure 4.3 represents a characterization of this.

Figure 4.3: Personal Preventive Health Services



Curative Services - Ambulatory Care:

The first objection to decentralizing the vast majority of funding for health to local levels is that majority of it is tied up in wages (recurrent costs). To decentralize funding for health means devolving decision making power to lower levels of government. If this is to represent any appreciable fraction of the health budget, this will require control over the pay of health workers other than ANM's, Anganwadi workers or ASHA's. In essence it means paying doctors and nurses.

This may be impossible. In that case, there is really very little that can be expected from decentralization in health. In this case, the best we can hope for in the reform of the health sector is to help local governments deal with the small (but potentially very important in terms of health status) amounts of money allocated to communicable disease control manageable at local levels. While doctors and nurses may be able to resist a change in pay structure – that is, they can continue being paid on salary – there might be more of a chance to bring more of the health workers pursuing the preventive and promotive aspects of health into the sphere of decisions of GP's. The amount of money devolved may be small but, again, the ability to choose a better mix of public health services could lead to better allocations.

Untying our hands and being free to consider alternative models of decentralization with fewer political constraints leads to more options. Again, the basic principle should be adhered to as closely as possible: that health care money should move from bottom up and not top down. Medical care providers should chase after patients to get paid, patients should not have to chase doctors in order to get care.

The appropriate form of decentralized ambulatory care services, what responsibilities reside with which levels of government and how well the reformed system is likely to perform will critically depend on how the issue of paying medical care providers is settled. Again, without substantial changes in this key factor, the prospect of major improvements is limited.

For example, given ambiguities in the law, it is unclear which level of PRI – district, block or GP – is to be given what kind of responsibility. In many states, if the discussion is underway at all, it appears that the level likely to be the focal point for health care is the district. If the nature of pay remains the same –

salaried providers with few consequences for bad performance, it is completely unclear whether this will make any improvement at all. In fact it may make things worse. The advantage of decentralization is to take advantage of the closer monitoring and supervision on a day-to-day basis that villagers and their local government can do. It is not clear that the district is in any better a situation to undertake this function than the state. In fact, the status quo is that District Health Officers are already charged with this supervision responsibility. The government is "deconcentrated"⁴⁵ to the district level as it is.

At the same time, there may be a loss of specialized technical skill that a state can provide⁴⁶ and the undocumented but widely held opinion by state level policy makers that lower level officials are more prone to corruption would then be a cost to decentralization without the compensating benefit of better monitoring. At lower levels, direct elections of GP chairmen who can be held responsible to voters for the performance of particular services – either by the ballot box or simply by being in continual close contact with the community would solve this latter problem. So, a partial decentralization without changing the basic structure of pay could make things worse.

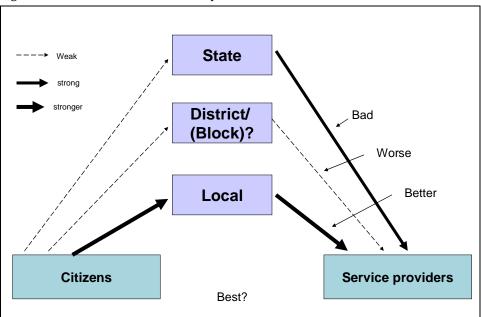


Figure 4.4: Partial Decentralization May Not Work

It is worth noting the main exception to the rule in developed countries whereby payment for providers are for services and not for salaries. The most important to note is Sweden where all physicians are local government employees. The reason for this is that it was only local governments – close to their constituencies - that were deemed capable of providing a sufficient degree of monitoring of performance. Two further features of the Swedish situation are worth noting. First, Sweden ranks 6^{th} on Transparency International's list of most honest governments and has a well-entrenched ethos of public service in its government employees. India ranks 90^{th} . Second, in the one local government large enough to support significant competition (Stockholm, population 3 million) current reforms are, again, tying payments to

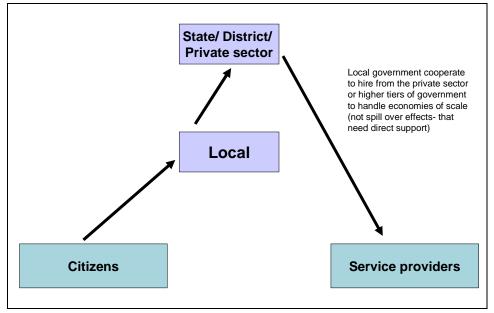
⁴⁵ "Deconcentration" refers to the deployment of state officials to particular localities. They are not elected by the locality, remain responsible to the state and, if part of a line agency, have little discretion over the use of funds within their sector and, of course, none at all between sectors. Decentralization (or devolution) gives more discretion in decision making to localities.

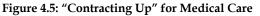
 $^{^{46}}$ Though this is a minor problem – in any decentralized system such specialized skills would still be necessary - this is a form of economies of scale – but could be provided on the basis of occasional need.

outcomes because of dissatisfaction with the quality of current services. Therefore, even in a context of a very efficient public sector, only local governments are considered competent and effective enough to provide adequate supervision and a jurisdiction of a size well within the size range of Indian districts was considered too large to ensure satisfaction with services.

If payment systems can be changed, more alternatives open up. One option is for GP's to "contract up" for medical services. Except for unusually rich places, Gram Panchayats know that they cannot afford a "real" (MBBS) doctor be in their village full time. The low quality care they get is not due to people not knowing that unqualified people are practicing as doctors – there are even different names for these kinds of providers across the country (Bengali doctors in much of North and West Indian states, Bihari doctors in West Bengal). The low quality care comes from a fully acknowledged lack of purchasing power.

Neighboring villages (whether from the same block or district or not) can cooperate by pooling their money and sharing a doctor hired from the private sector (or a public doctor with appropriate permission) visiting villages in rotation. The GP's can be assured of relatively⁴⁷ competent care on a predictable basis. If the provider does not show up, s/he doesn't get paid. There is no competition "within" the market at any one time – as mentioned and the GPs do not have enough purchasing power to engage a set of providers. However, competition can be "for" the market as providers will have to compete annually for the contract to serve the villages. This form of competition can reduce costs, make sure standards have been met over the year and reward good performance. So accountability is enforced annually by the conditional renewal of contracts and weekly (or as per agreement) by withheld pay if the provider is absent on the specified day.





This model may be distinctly superior to a private market even though it is for a private good. One of the problems of medical care in India is that there is a tendency to overmedicate and overuse injections and antibiotics. As discussed above, this could be due to doctors looking for more money or the pressure from patients' uninformed demands. A possible solution is that when doctors are contracted by a consortium of Gram Panchayats, agreements in their contracts can stipulate that improper care not be provided and, with

⁴⁷ Though see Das and Hammer (forthcomming) for some doubts as to exactly how well qualified.

the stamp of approval of the GP along with an absence of competitors at any one time⁴⁸, such practices may be avoided.

Box 4.3: The case of the district of Rahim Yar Khan in the Punjab, Pakistan

An example of the *logistics* of the organizational form of "contracting up" is provided by the following case study. The main features of this program were that agreements were made with doctors to serve three Basic Health Units (the equivalent of PHC's in India) and to visit each at specified times. Their pay was doubled but since they were covering more facilities, the program was cost-neutral at worst. Attendance was easily monitored since the designated day of the visit was clearly specified. The results appear to be quite impressive. Facility utilization increased dramatically (on the assumption that the alternative was a "quack", self care or no care at all rather than a private doctor, this is a good thing). People were able to predict when centers would be open and not waste a day from work with the risky prospect that the doctor would not be there.

The in box 4.3 is not perfect for the argument made here because the policy was imposed from above (from the district level). However, there is no reason why the arrangement cannot be voluntary, perhaps with some help in coordination coming from higher tiers of government.

Another possibility is for the GP to provide services as a "purchasing agent" for individuals. Without actually entering into a contractual arrangement with a particular provider, the government might help identify better providers – public or private, possibly give some support to the family and possibly use the greater purchasing power of acting for the collective to get better prices or services.

There are many alternatives. Maybe with the purchasing power that devolved funds give them, the GP's can get mobile clinics to visit (and be paid on arrival) either regularly or on demand. That would however only work where there are pucca roads. Where there aren't roads, the GP's would have to solve the problem differently - maybe some would build the road. Maybe some would experiment with tele-medicine as offered by, say, Narayan Hrudayalaya Heart Hospital, Bangalore.⁴⁹ That obviously would only work where such connectivity is possible. This is exactly our point - different circumstances require different solutions and only people with enough motivation and local knowledge of both physical conditions and citizens' preferences can find the right one.

In each of these scenarios, the role of higher levels of government will change. To the extent that decisions over care are decentralized, higher tiers can keep watch over the performance, satisfaction and health status in local governments. This can be used as a source of public information to help inform voters, to help village health committees and GPs themselves know what to expect from different providers (public and private) and help everyone (GPs, committees, people at large) compare and learn from different experiences. While the options might be many, the bottom line in Ambulatory care (as illustrated in Box 1.2 and Box 4.4) is that *the ''right'' way to go is dependent on the payment mechanism*.

⁴⁸ This could be one of the criteria for the annual review of performance of the contracted provider.

⁴⁹ Dr. Devi Shetty "Year 2010 – India, World's Largest Mass Healthcare Provider" (2006)

Box 4.4: Lessons from international experience

Papua, New Guinea and Indonesia: One consistent characteristic from cases that have not worked well is that services were decentralized to lower level governments without changing the payment mechanism for doctors. The Papua New Guinea (PNG) case decentralized the provision of services to the provincial level with no noticeable difference in service delivery; indeed there were a few glaring failures where the central government had to reassert its authority. Provinces in PNG are very large geographically, though, and the same lack of supervision with doctors on salary was continued before and after decentralization. Improvement for salaried workers cannot be expected unless those closest to the services to be delivered can monitor and have the authority to pay. The same can be said of the case in Indonesia

<u>Bangladesh</u>: An NGO, one kind of legitimate entity that can support a GP, hired women in villages to teach other mothers the use of Oral Rehydration Therapy for children with diarrhea. A small part of their pay was a salary. A much larger percentage was a bonus, the value of which was dependent on an independent test of how many women in a sample of their students actually knew the correct way to make and administer the treatment. Success rates were very high; in addition, trainers adapted their pedagogical technique to their students. They ignored the lecture-based standard curriculum and developed one with more "hands-on" practice by the mothers. They had a high stake in achieving success since their pay depended on it. This kind of project is only possible with the close, regular monitoring a local government is able to perform.

Source: India rural governments and service delivery, World Bank,

Curative Services - Hospital Care:

One major constraint in this health service on the role of the lower tiers of PRIs in handling expensive, catastrophic, care is that of scale. Either hospital services or insurance schemes large enough to spread risk needs to cover much larger numbers of people than in any GP and except for very densely populated areas, Block Panchayats as well. However, there are several contributions that local governments can make to help handle catastrophic risk but the nature of their role is critically dependent on what reforms take place in the sector as a whole.

There are many alternatives: first it may be possible to introduce real health insurance – universal and subject to actuarial analysis. As discussed above – this is difficult to do. At sometime in the future, India will probably have this system but administering it – checking that services that were billed to the government were actually given, that there had been no exaggeration of severity (as would be needed in a Diagnostic Related Group – a payment system where government reimbursement is done via type and severity of the medical condition, not on the basis of costs incurred and a host of other complications will limit its adoption for quite some time. In terms of our standard diagram, an insurance program illustrates the deliberate use of the "short route" of accountability in the service of a government program. The short route is the default option for any service that can be supplied privately in the form of the market. But the government can use the monitoring ability of patients themselves in deciding how, and on whom public money should be spent. Insurance is a conditional voucher – given to individuals on the condition that it be used only when medical problems arise.

Because of the scale necessary to adequately spread risk, the level of government best suited to fund and, probably, administer such a program, needs to be very large. Gram Panchayats and probably blocks are too small without a complex system of re-insurance at higher levels of government. For epidemics: states and (given a major catastrophe such as the tsunami) even the Government of India may be necessary for dealing with geographically correlated risks. There may be very little role for PRI institutions in general (though some districts such as Midnapur in West Bengal are large enough to handle this risk) in a fully developed insurance system.

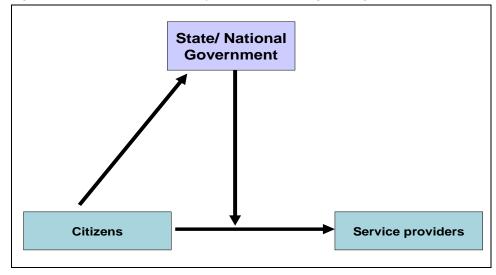


Figure 4.6: Public Insurance – money follows patient, high level government spreads risk

Until fully transportable insurance (meaning it can be used anywhere – in public, for-profit or not-for profit private facilities) becomes a possibility, hospital services are likely to be funded by government. The questions are which one and how? This, in turn, depends on whether or how payment schemes for hospital services are redesigned. One promising direction is to "corporatize" hospitals. This would turn them into not-for-profit institutions that are run under a hard budget constraint – each one would have to be self-sustaining (though the funds ultimately would likely come from government). Such corporatized entities would have to compete for payments dependent on patients they attract. No government would have much to do with day to day management and only a relatively high level of government – states, most likely – would be in a position to regulate such facilities. This option is very similar to a full insurance scheme.

Hospitals, of course, are subject to much higher economies of scale than the services of a single doctor. If even a single doctor is too expensive to have full time, then obviously hospitals are way beyond the reach of any single GP. However, the principle of money following the patient can still use the GP as an intermediary. If the "contracting up" model is established, it is possible that the contracted doctor will be able to choose the appropriate hospital. This could introduce some competition between hospitals, again under the condition that payments to hospitals depend on attracting patients through referrals. This arrangement carries with it risks of corruption. To counter such risks, this decision may need to be subject to local health committees. This may not be possible, either, for any one episode so a certain amount of corruption may have to be tolerated for that episode. One role of the GP – probably through a health committee – could be to make sure that the choices made by the contracted doctor are generally sound and not over-priced. This would influence the decision to extend his or her contract.

If the direct management of hospitals remains within the government bureaucracy, it is unlikely that Gram Panchayats will have any more say in their management or overall budget than they do now. In this case, the only thing a GP would be able to do is to make sure there are roads that can support speedy transport to hospitals. Acting as an agent for an individual, it might also be able to avoid requests for illegal payments by lodging complaints with more weight than any individual would have. But given current payment structures for hospitals, GPs will continue to have little leverage.

In this section, we wish to emphasize two points. The first is that we have attempted to provide options for decentralization by category of service and as such, this is not an all inclusive list. The second is that each type of health service requires a different intervention as the binding constraints varies for each of them – a "one size fits all" should not be applied to decentralized health services.

V. Putting it All Together: Government of India, PRIs and Health Policy

*'Primary health care should be made directly accountable to local elected bodies and PRIs with appropriate devolution of administrative and financial powers*⁵⁰

The previous sections have made the case for decentralization in health services as well as developed some options of identifying which level of government is best placed to ensure accountability for various services and how this might be achieved. Using this framework, we now attempt to analyze current efforts by Government of India to improve the delivery of health services. The focus of our analysis is the National Rural Health Mission (NRHM), a flagship project of the current government.

In 2005, the GoI launched NRHM with the objective to "*carry out necessary architectural correction in the basic health care delivery system*." The core strategy of the NRHM is to empower local governments to manage, control and be accountable for public health services at various levels. To do so, it mandates that state governments enter in to Memorandums of Understanding (MoU) with GoI articulating their commitment to devolve health services to local governments. Figure 5.1 details the institutional structure of the NRHM.

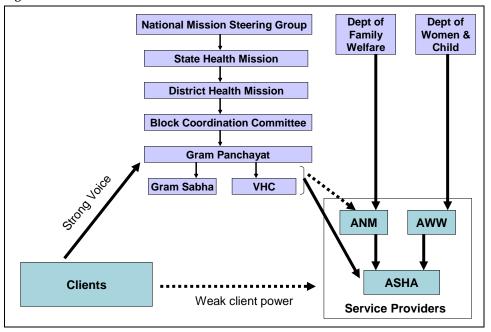


Figure 5.1: The Institutional Structure of NRHM

There are three key components of the NRHM that we wish to highlight here. First it identifies the district as the key institutional unit for planning, budgeting and implementation of health services. To this end, the NRHM mandates the creation of a district health mission headed by the district panchayat chairperson, the district collector as the co-chair and the chief medical officer as the mission director. To support the district health mission, a district health society will also be created. The society will be responsible for the management of all heath and family welfare programs in both rural and urban areas.

The key role articulated for the district is the development of cross sectoral health plans that integrate health concerns with determinants of health such as hygiene, sanitation, nutrition and safe drinking water.

⁵⁰ 10th plan Mid Term Appraisal. Paragraph 2.269

The plans will be an amalgamation of village health plans (discussed below), state and national plans and priorities as well as other centrally sponsored schemes.

Crucially, the mission envisages the possibility of moving the district health mission in the direction of paying hospitals by services by way of reimbursements, on the principle of "money follows the patient" discussed earlier.

Second, the NRHM introduces a new community based functionary called Accredited Social Health Activist (ASHA).⁵¹ The ASHA must primarily be a woman resident of the village, preferably, in the age group of 25 to 45 years, with formal education up to eighth class. She will be selected by the Village Health and sanitation Committee (VHC) and the Gram Sabha. It is envisaged that the ASHA will coordinate with the ANM and AWW and be accountable to the GP. The ASHA's role will be to promote good health practices and *provide primary medical care for minor ailments* such as diarrhea, fevers, and first aid for minor injuries. The government will provide a drug kit to each ASHA to facilitate this new task.

The ASHA is not a paid employee and would therefore not be entitled to any pay or honorarium, but be eligible for compensation for services provided under various schemes and programs of the Government. The compensation to ASHA based on measurable outputs will be given under the overall supervision and control by the Panchayat. For this purpose a revolving fund would be kept at the Panchayat.

Finally, NRHM mandates the preparation of health plans for every village through the village health committee. These plans in turn form a component of the district level health plan.

In recognizing the potential of local governments in strengthening the delivery of health services, the NRHM marks an important step in the direction of articulating a role for district and gram panchayats in delivering health services. However, it does not go far enough. There are two key issues that we want to highlight here.

1. NRHM privileges the district as the key implementing body without providing the necessary discretion and autonomy at the GP level to reallocate resources and change activities according to the needs of the individual GPs. At the moment, although NRHM mandates the development of village level health plans, these only form one component of the district level plans which in turn determine the quantum and nature of funding that is allocated at the GP level. In so doing, NRHM encourages what we have described earlier as 'partial decentralization' where voice and compact are not aligned.

At the district level, the NRHM also highlights the possibility of identifying means of encouraging the "money follows the patient" model for hospital based care. While this is important, as we have discussed earlier, the problems experienced when money does not follow the patient are far more severe at the PHC level than for hospitals. Again this leads us back to the partial decentralization problem and will not contribute to making any substantial changes in the status quo.

2. NRHM does little to strengthen the compact. As we have argued earlier, a crucial principle of accountability is that there be as few lines of accountability as possible in order to prevent contradictory orders and create confusion on the part of the provider. Figure 5.1 shows that at the level of the ASHA, NRHM does just this. The ASHA is accountable both to the GP and its parent department, the department of family welfare and women and child. The same argument applies at the district level where functionaries at the district health mission report to multiple departments at the state level.

⁵¹ The norms are '1 ASHA for 1,000 population'

Strengthening the Impact of NRHM- Some Suggestions:

Greater devolution to GPs:

As mentioned, although the NRHM **allows greater flexibility** in implementing Centrally Sponsored health Schemes and play an important role in increasing high priority interventions, its impact will only be felt **if local bodies** much smaller than District Panchayats **are given more discretion and autonomy** than appears likely to happen in the current plan. Ideally, more funds ought to be allocated whereby GPs have the discretion and autonomy to change the type of preventive activities they can use. Here, the ASHAs and ANM workers can play a critical role in improving the use of public funds by encouraging GPs to use funds allocated to them for population based public goods and preventive/ promotive activities.

Contracting up:

If as discussed, GPs were provided with the resources to act as 'purchasing agents' and employ private physicians, it could improve accountability relationships enormously. The NRHM, in its guidelines does allow for this possibility but in a limited way. Discussion of employing doctors in NRHM documents seems limited to contracting them to staff current public facilities. Further, there is substantial resistance in state ministries of Health to give up money and control to PRI institutions generally and certainly to levels below the District Panchayat. Given the central role that contracting up can play in improving accountability; it is critical that the central government encourage state governments to implement this seriously. One way to do this would be for the center to use the MoU as a tool to incentive state governments to contract up.

Balancing information asymmetry:

The only place in the proposal where the demand for medical care might be influenced is if ASHAs can convince people who are ill to visit public sub-centers, PHCs, CHCs or competent private practitioners. Another area where the ASHAs could have influence, if trained correctly and trusted by the community, is in counteracting a tendency discussed earlier (see box 2.2), in the private sector to over-prescribe. She would have to convince people that injections are not necessarily better than pills, that glucose drips are never a good idea and that receiving lots of medicines is not necessarily better than getting nothing at all for many common ailments. We should not underestimate the difficulty she is likely to face in accomplishing these tasks.

Monitoring (data collection and info sharing):

The GoI should also take advantage of the stated goals of the NRHM to improve surveillance, monitoring and measurement of health outcomes as well as inputs and develop better information to help policy making in the future. The "Guidelines for ASHAs" lists a wide variety of monitoring indicators that are supposed to be collected. However, many of them are not possible to collect without regular household surveys (e.g., % of children with diarrhea who received ORS, child malnutrition rates). There are no such surveys. Further, since health outcomes are determined by many factors, there is no way to use these indicators to find causal relations between policy inputs and ultimate outcomes. Data collection of this sort is cheap relative to the programs they can help inform and are genuine public goods. GoI could do worse than to help states create data bases of sufficient size (to measure rare events such as maternal mortality and to be representative of areas small enough for someone to feel accountable for), frequency (again for accountability) and range of questions (to determine the contribution of different factors such as education, sanitation or access to public medical care to health status).

Conclusion

The Government of India has taken a renewed and serious interest in implementing the 73rd amendment. Even if it were not a good idea to decentralize health services, it is a fait accompli and means have to be found to make sure it improves the lives of the Indian people. However, the situation is better than that and more decentralization in the health sector opens up new opportunities for improvement in health status, client satisfaction and responsive and accountable services. We hope that by placing the issues specific to health within the much broader context of decentralized services, this paper can contribute to a more informed debate over the options facing the sector and the needs of government officials charged with these new responsibilities.

Appendix I: List of Market Failures

- 1. *Public goods*: these are commodities that cannot be provided by a private market, <u>even in principle</u>, because there is no way for a provider to be paid by customers. In the jargon, these goods are non-excludable (meaning you cannot prevent people from benefiting if they refuse to pay that's why it's hard to get the private sector into these activities) and non-rival (meaning one person's benefit does not reduce the benefit to anyone else). There are very few examples of pure public goods (the usual example is national defense) but are clearly the responsibility of the state since if the government doesn't provide them, they simply won't exist at all.⁵² The state must guarantee their provision but needn't actually produce them itself it could just buy them
- 2. *Externalities*: these are less extreme examples of public goods in which some of the benefits or costs generated by a particular market are not borne by the buyer or seller in that particular market. The textbook example is air pollution where the manufacturer of steel, say, does not pay for the costs imposed on society and neither do the specific buyers of the steel or steel products. Steel is a private good but the pollution it causes needs to be handled by someone (usually the government) outside of the steel market.
- 3. *Natural monopoly*. Some things can only be efficiently produced by a single provider. This is usually because of technological factors in which costs decrease with the amount produced beyond the level of demand for the whole market. Therefore one firm can eliminate all competition, charge high prices and produce less than is socially optimal.. The list of such goods changes with time and technology telephones used to be a monopoly until mobile phones provided competition.
- 4. Asymmetric information. This is based on one person in the market knowing something that the other doesn't in such a way as to reduce overall efficiency. How this influences allocation is usually context specific (often applied to credit and insurance markets), is important for some aspects of health and will be discussed there rather than discussing all possible applications. It is important to note, however, that it is both the "asymmetry" of the information and the importance in influencing efficiency that is relevant to policy decisions. Any producer of any good knows something more about that good than the buyer (the former deals with them every day) but this fact, alone, does not imply a market failure. There has to be a particular reason why this interferes with the functioning of the market.
- 5. *Equity*. Sometimes included in this list of market failures, sometimes mentioned separately is the correction of the distribution of income a free market will generate a particular distribution and this may or may not correspond to agreed norms of fairness. In India, of course, there is the added dimension of public concern for the poverty stricken, socially excluded and vulnerable groups such as Scheduled Caste or Scheduled Tribes (SC/ST).

The standard, least contentious⁵³, view of equity, though, relates to the overall well-being of individuals, <u>not equity or equality in every single market</u>. Improving equity is another reason

⁵² In India, it is very important to make this usage clear since there is overlap between technical jargon and common English usage and, therefore, often a source of confusion. Private goods include everything that is not a public good. Public goods as defined here mean that the public must provide them because it is actually <u>impossible</u> for the private sector to do them, not merely undesirable. There is no value judgment here: goods are public not because they happen to be provided by the public sector nor because we might like them to be – it is because they <u>have</u> to be. ⁵³ Some would argue that equity of any sort is not really a good justification for intervention and that as long as the

[&]quot;rules of the game" are fair, the particular outcome of markets is fair as well (Nozick, 1971). This is a bit of a fringe group, though, and we will stick to more common practice.

governments might intervene and we'll include this under the general heading of market failure. Equity considerations enter the health discussion in several ways but do not, without a great deal of empirical evidence, argue for blanket support for all health services. Subsidies that disproportionately help the poor are those on goods that they use disproportionately more than the non-poor. Staple grains are a good example. Demand for health care is very income elastic (meaning use rises disproportionately as incomes rise) and therefore, a priori, is not a natural candidate for subsidy on equity grounds.

6. *Merit goods*. This is listed for the sake of completeness alone. The definition is a good that "society" as a whole thinks people should have even if the people themselves, acting as individuals, don't express a demand for them. It is often confused with the issue of "equity" in the sense that people think poor people should have them even if poor people themselves feel they have more pressing needs such as food. In this case we might call it an issue of "specific egalitarianism"⁵⁴.

⁵⁴ Tobin (1970)

- Ahmad, J. K, Devarajan, S, Khemani, S and Shah, S, (2005) "Decentralization and Service Delivery", World Bank Policy Research Working Paper No. 3603
- Arrow, J.K, (1963) "Uncertainty and the Welfare Economics of Medical Care", American Economic Review, Vol. 53, PP 941-973
- Balakrishnan, Gopakumar, K, S, Samuel, P, Shekhar, S, Vivekandanda, M (2005), "Benchmarking India's Public Services: A comparison across states", Public Affaris Center
- Berman, P, Hammer, J, (1995) "Ends and Means in Public Health Policy in Developing Countries", Health Policy, Vol 32 (1-3) PP 29-45
- Castro-Leal, F.J, Dayton, J, Demery, L and Mehra, K (2000), "Public Spending on health care in Africa: do the poor benefit?" Bulletin of the World Health Organization
- Chaudhury, N, Hammer, J, Kremer, M, Muralidharan, K, Rogers, H.F. (2006a), "Missing in Action: Teacher and Health Worker Absence in Developing Countries", Journal of Economic Perspective', Vol. 20, No. 1, PP 91-116

_____. (2006b) "Is there a doctor in the house?" forthcoming.

- Das, G (2006). "The Best of Times and the Worst of Times", Times of India, April 22, 2006
- Das, J. and J. Hammer. 2004a. "Which Doctor? Combining Vignettes and Item Response to Measure Doctor Quality." Policy Research Working Paper Series, #3301. The World Bank, forthcoming in *Journal of Development Economics*.
 - _____. 2004b. "Strained Mercy: Quality of Medical Care in Delhi." *Economic and Political Weekly*, February 28, 2004.
- ______. forthcoming "Money for Nothing: The Dire Straits of Medical Practice in Delhi, India", Journal of Development Economics
- Dulleck, U, Kerschabamer, R, (2006)" On Doctors, Mechanics, and Computer Specialists: The Economics of Credence Goods", Journal of Economic Literature, Vol. XLIV, PP. 5-42
- Filmer, D, Hammer, S.J, Pritchett, H.L (2000), "Weak Links in the Chain: A diagnosis of Health Policy in Poor Countries", The World Bank Research Observer, vol. 15, no. 2 PP47-66
- Filmer, D. and Pritchett, H.L. (2001) "Estimating Wealth Effects Without Expenditure of Data Or Tears: An Application to Enrollments in States of India." *Demography*
- Goetz,A.M and Gaventa, J (2001)' Bringing Client Voice and Client Focus in Service Delivery', IDS Working Paper No. 138, www.ids.ac.uk;
- Goetz and Jenkins (2004); 'Accountability', in Adam Kuper and Jessica Kuper (eds), The Social Science Encyclopedia, New York, Routledge

Government of India (2005), 10th Plan Mid Term Appraisal, Planning Commission, www.planningcommission.nic

Government of India (2006), "About NRHM", http://mohfw.nic.in/national_rural_health_mission.htm ______. (2006), "NRHM Newsletter", http://mohfw.nic.in/national_rural_health_mission.htm ______. (2006), "Frequently Asked Question:, http://mohfw.nic.in/national_rural_health_mission.htm

- Government o f India (2001), "Evaluation Study of Functioaning of Primary Health Centers (PHCs) Assisted under Social Safety Net Programme (SSNP)", Programme Evaluation Organization, Planning Commission, Government of India.
- Hsiao WC (1984), "Transformation of health care in China," New England Journal of Medicine, 310: pp 932-936.
- Holmstrom and Milgrom (1991) 'Multi-task principal-agent analyses: Linear contracts, asset ownership and job design', Journal of Law, Economics and Organization, 7, pp.24-52
- Jha,A.K, Dudely, J.B, Kizer,K.W, Perlin, J.B(2003), "Effect of the Transformation of the Veterans Affairs health Care System on the Quality of Care", New England Journal of Medicine
- Keifer,P, Khemani, S, (2003) " Democracy, Public Expenditures and the Poor", The World Bank Policy Research Working Paper Series,: 3164
- Mahal, A., J. Singh, F. Afridi, V. Lamba, A. Gumber and V. Selvaraju. (2002). Who Benefits from Public Sector Health Spending in India. New Delhi: National Council for Applied Economic Research, 2002.
- Mehta, P.B. (2003), 'The Burden of Democracy', Penguin, 2003
- Mosca, I (2005), "Is Decentralization the Real Solution? A three country study", Health Polic, Vol 77, PP 113-120
- Murray, C.J.L., K. Styblo and A. Rouillon. 1993. "Tuberculosis." In D.T. Jamison et al (eds.) *Disease Control Priorities in Developing Countries*. Oxford University Press for the World Bank, New York.
- Newell, P. and Bellour, S. (2002), 'Mapping Accountability: origins, context and implications for development', IDS Working Paper No. 168, www.ids.ac.uk
- Nozcik, R (1974),"Anarchy, State Utopia", Basic Books, New York
- Phadke, A (1998), "Drug Supply and Use, Towards a Rational Policy in India, Sage publications, New Delhi
- Sainath, P (2006), "The health of nations: seeking a way forward", The Hindu, January 4
- Saxena, N.C. (2004) 'Improving Delivery of Programs Through Administrative Reforms in India', www.nac.nic.in
- Scheiber, G. J Poullier JP, Greenwald LM. (1991), "Health Care Systems in Twenty Four Countries", Health Affairs, fall, PP 23-38

Sen, A (2005), 'India's poor need a radical package', The Hindu, January 9, 2005

Shetty, D (2006), "Year 2010 – India, World's Largest Mass Healthcare Provider" www.hsph.harvard.edu/pgda/Shetty_Presentation1.ppt

Transparency International (2005) www.transparency.org

Tobin, J (1970), "On Limiting the Domain of Inequality", Journal of Law and Economics, October 1970, PP 263-77

Water and Sanitation Program (2003) "Jal Manthan- A rural Think Tank"

- World Bank. (2003). World Development Report 2004: Making Services Work for Poor People. Washington D.C.
- Zeckhauser, R. (1970). "Medical Insurance: A Case Study of the Tradeoff Between Risk Spreading and Appropriate Incentives." *Journal of Economic Theory*, Vol. 2, pp. 10-26.