

# GOVERNMENT HEALTH FINANCING IN INDIA: CHALLENGES IN ACHIEVING AMBITIOUS GOALS

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#### Health, Nutrition and Population (HNP) Discussion Paper

## Government Health Financing in India: Challenges in Achieving Ambitious Goals

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Abstract: The Government of India has publicly committed to a doubling or trebling of government health spending by 2012 and launched a major program, the National Rural Health Mission (NRHM), to help spend the additional funds and achieve better health outcomes. This paper reviews recent data on trends in government spending and various scenarios of central and state funding to assess the feasibility of achieving these financing goals. The goal of 2 percent of GDP for government health spending is unlikely to be achieved, although there is clear evidence of program growth. Much larger state-level spending is needed to accelerate overall government spending in India's federal system. In addition, there is evidence of constraints in the ability to spend significantly increased budgets in a timely way and possible state substitution of increased central funding for existing state budgets. Significantly increasing government health spending in India requires more than simply raising budgets at the central level. NRHM does show some positive effects, but the rapid gains envisaged will require greater efforts to address the shortcomings of government systems and creative approaches to India complex federal financing system.

**Keywords**: Health Financing, India, Government Expenditures, Health Systems

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## **GOVERNMENT HEALTH FINANCING IN INDIA:**CHALLENGES IN ACHIEVING AMBITIOUS GOALS

#### **INTRODUCTION**

The government health financing landscape is changing fast in India. There is a strong political commitment at the highest level to increasing public spending on health from about 1% of GDP to 2-3% of GDP by 2012. In keeping with this goal, the central government has increased its health spending substantially in the last 3 fiscal years, mainly for the national flagship program, the National Rural Health Mission (NRHM), that provides increased finances to states for existing programs as well as funding for several new initiatives.

In India, states contribute the bulk of government health financing, which is in consonance with India's constitutional decentralization whereby health is a "state subject" (Constitution of India). While the goal of 2-3% of GDP is voiced by the central government, achieving the goal would not be possible without the active involvement of states. Even if this commitment is center-led, which is implied in the strategy of raising the central share from less than 30% in 2005 to 40% in total government health spending by 2012, the states would still have to substantially increase their contributions to reach the goal. Given that the states' role is crucial to achieving the goal, how credible is the overall commitment by the center? Do states attach the same priority to health as shown by the center? Even if, in principle, states attach similar priority, what demand does this goal places on state level funding? Can states mobilize the kinds of resources needed to achieve the goal? Furthermore, central government funding may not be wholly additional. States may partially substitute central funding for funding on their own account, thus somewhat offsetting GOI's efforts to increase total government health spending. This may be exacerbated if states run into the constraint of spending additional funds given their limited capacities to implement programs. These are all interesting and pertinent issues to investigate.

One articulation of the central government's pledged increase in public spending on health in India has been the introduction in 2005 of the National Rural Health Mission (NRHM) (MoHFW 2005). NRHM is designed as an umbrella program – consolidating existing programs as well as adding some new ones – with a flexible, bottom-up perspective whereby district and village level health plans are aggregated up to the state level which are then annually submitted to and financed by the center, with some proposed matching of funds by the states to be introduced during the course of the implementation of the program. To what extent does NRHM expenditure currently impose, and will impose in future, financing obligations on the states? For example, improved facilities and increased access will need to be sustained in the future. Can the states sustain the financing of additional activities being undertaken under NRHM?

Increasing of funding is one thing and effectively utilizing those funds is quite another. NRHM has a stated aim to not only increase financing of basic health care services in

rural areas of the country with a special focus on 18 lagging states<sup>1</sup> but also improve efficiency and increase effectiveness of public investments in the health sector. As NRHM is focused mainly on improving primary care, the implementation of the program is expected to improve allocative efficiency of public health spending. Moreover, NRHM intends to bring about an "architectural correction" to improve effectiveness of public health spending. Mechanisms for this include block grants to districts and local governments; demand-side financing for institutional deliveries (Janani Suraksha Yojana); public-private partnerships; and other innovations which districts and states can put forward for funding under new health plans. These innovative mechanisms exist alongside more "traditional" mechanisms such as filling existing vacant but sanctioned posts, increased procurement of pharmaceutical and supplies, improved management information systems, and capacity-building for health managers.

In this paper, we assess the implications of the stated government health financing goal, and the strategy of achieving the goal, in India's federal system. Furthermore, now that NRHM is in its fifth year, we explore the early evidence on the substitution, sustainability and effectiveness of increased government health spending. The analysis in the paper shows that since states finance the bulk of government health expenditure in India, the proposed hike of health spending to 2-3% of GDP is unlikely to be realized by 2012 as this would entail increases in state health spending levels of implausibly high magnitudes. In addition, it is unclear the extent to which such increases in health spending will be sustained beyond 2012 especially from the perspective of the states. Even if one leaves the issue of resource increases aside, state-level absorptive capacity constraints and a potential substitution of state funds by central funds may further reduce the effective magnitudes of the proposed increases in health spending.

The paper is organized as follows. Section 2 provides a brief overview of health spending in India and examines the context that led to the political commitment to stepping up government health spending in India. Section 3 gets into the specifics of financing strategy to examine how realistic or unrealistic the health spending goal is, and what does it translate to in terms of resource commitments, both at central and state level. Section 4 focuses on the actual experience with health allocations and spending post-NRHM. Analyzing early trends of NRHM financing, this section also brings out the challenges being faced in trying to increase government health spending in India. In particular, this section explores the issues of substitutability, sustainability, and effective utilization of government health funding since the launch of NRHM. Section 5 concludes the paper.

<sup>&</sup>lt;sup>1</sup> The focus states include 10 large states (Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttarakhand, and Uttar Pradesh) and eight northeastern states (Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, and Tripura). Non-focus large states are: Andhra Pradesh, Goa, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, and West Bengal. These three groups of states are also referred to as Group A, Group B and Group C states, respectively in the text.

#### **HEALTH FINANCING OVERVIEW FOR INDIA**

Although total health spending in India at around 5% of GDP or US\$40 per-capita is comparable to countries at similar levels of development, government health spending in India at 1% GDP or US\$8 per-capita is comparatively low.<sup>2</sup> Low public health spending is likely being compensated by high private health spending, over 90% of which comes from out-of-pocket payments by households. <sup>3</sup> The high share of out-of-pocket payments for health care imposes a large financial burden on households (Berman, Ahuja, and Bhandari 2009). Stepping up government health spending is expected to provide financial protection, especially to low-income households.

The figure below shows the share of government health expenditure in GDP. The share of total government health spending shows a secular decline from over 1.1% in 1990 to less than 0.9% in 2005. This secular decline is mainly on account of the decline in government health spending at state level. The center's share shows a marginal increase between 1990 and 2005. The year 2005, however, marks a turning point when the share of government health expenditure in GDP begins to rise.

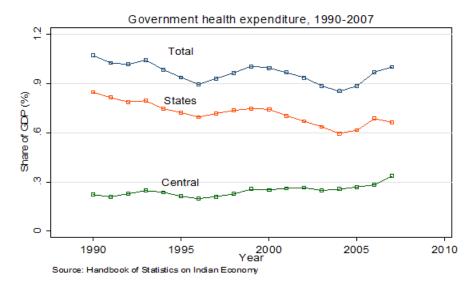


FIGURE 1: GOVERNMENT HEALTH EXPENDITURE, 1990-2007

Given the low and declining share of government spending on health, the need for stepping up this spending had long been recognized but very little had happened by way of commitment or action until 2005 when the congress party-led United Progressive Alliance (UPA) government came to power with the support of, among other parties, the

<sup>&</sup>lt;sup>2</sup> Unlike primary education in India which is funded through "an education cess," health care in India is supported through the general budget. India's dependence on external assistance for health has traditionally been low relative to comparator countries. In 2006, for instance, only about 0.7% of total health spending (public as well as private) was externally sourced in the country. By way of contrast, in 2006-2007, average externally-financed share of health spending for all low-income countries was about 24.5% and for the South Asia region was 13.0%.

<sup>&</sup>lt;sup>3</sup> There is significant variation in the public-private mix of health expenditures within the country: for example, the government share in total health spending was only 10.8% in Kerala while it was 26.6% in its neighboring state, Tamil Nadu (NCMH 2004).

Community Party of India (Marxist) that is known for its pro-social sector bias and hence favored social sector investments. In fact, stepping up social sector spending, including the health sector spending was one of the election promises of the UPA coalition. After the coalition came to power, the government launched a string of social sector programs of which NRHM was one.<sup>4</sup> Although the reprioritization of health by the central government in India was largely driven by political change, acceleration in economic growth and the consequent increase in government revenues made funding of these programs possible. The central government's focus on health is likely to continue following the Congress party's 2009 election win.

Indeed, economic growth tends to be associated with not only a higher overall level of resources but also a higher *share* of public resources devoted to health. There are several reasons why the government share of health spending tends to increase with income. Rising incomes are often associated with a greater demand for, and supply of, health care. Richer countries tend to have older populations with more non-communicable diseases and a greater need for chronic care, the relative price of health care rises with income driving up spending, and the revenue-collection capacities of governments increase with income, as do societal preferences for more government financing for health (ADB 2006). However, India's case has been anomalous in that despite years of strong economic growth India's public health expenditure didn't increase until there was also a strong political commitment.

<sup>&</sup>lt;sup>4</sup> For example, the Rashtriya Swasthya Bima Yojana which is a health insurance program for below-poverty-line (BPL) families; the National Rural Employment Guarantee Act of 2005 which provides for up to 100 days of guaranteed wage employment in rural areas for adult members of any household.

#### THE FINANCING IMPLICATIONS OF NRHM GOALS

India's Union (central) government has put forward specific plans to increase transfer of central funds to states via NRHM over the period 2005-2012. We analyze the corresponding increase in state-level financing of health that would be required in order to meet the pledge of making government health expenditure be 2-3% of GDP by 2012 in India.

Along with the overall government health financing goal of 2-3% of GDP, the central government spelled out the strategy for achieving this goal (MoHFW 2007). The salient features of the strategy are as follows:

- Increased central funding for health is mainly through NRHM, which at the start of the program accounted for about 60% of the total funding by the health ministry (Berman and Ahuja 2008).
- This increase is to be center-led as the center would increase its share in total government health spending from less than 30% to 40% by 2012.
- The center would increase its allocation of NRHM by 30% per year for the first two years of the program and 40% per year thereafter until 2012.
- Contributions by states to increasing government financing would amount to at least 15% of center's NRHM allocations for each year over the period 2007-2012, although this currently foreseen only for the period 2008-2012.
- An understanding that states would increase their health budgets by at least 10% per year in nominal terms.

We do some analysis to see what these strategies imply. We work out three different scenarios. The assumptions common to all the three scenarios are that: (i) the central NRHM allocations from 2005-06 to 2011-12 increase as planned by the government; and (ii) the non-NRHM central allocations are assumed to grow at 10% per annum, beginning with budget allocations of 2005-06. The scenarios differ in terms of the growth in states' health allocations to achieve a particular goal. The GDP figures considered are the actuals for the period 2005-06 and 2008-09, while for the period 2009-10 and 2010-11 the latest IMF forecasts for India are used (IMF 2009). For 2011-12, the growth is assumed to be 13% (including 5% on account of inflation).

**Scenario 1:** With the assumptions above about increased center funding, if states increase their health allocations by 10% every year beginning with the budget allocation of 2005-06, we find that the total health allocations (center and states combined) will amount to only 1.33% of GDP by 2011-12, which will be much lower than the desired goal of at least 2%. Moreover, the share of center health allocations in total budget allocations would reach 52% by 2011-12, which is greater than the target of 40%.

<sup>&</sup>lt;sup>5</sup> The IMF forecasts are as given in the World Economic Outlook, July 2009. The IMF forecasts are for the calendar years, though.

**Scenario 2:** Given the assumptions on central health allocations, we estimate by how much states' allocations need to grow in order to achieve the proposed center-state ratio of 40:60 in total government health allocations. In comparison with Scenario 1, this means higher state allocations. We find that states' allocations must grow by 22.2% every year beginning with the budget allocation of 2005-06. This would take the share of total government health allocations in GDP to 1.85% by 2011-12, actually quite close to the goal of 2%. **Scenario 3:** Given the assumptions on central health allocations, we analyze by how much states' allocations need to grow in order to achieve the goal of 3% of GDP. We find that the growth rate comes to around 38% every year beginning with the budget allocation of 2005-06. This yields center-state ratio in total health allocations to be 25:75 in 2011-12, much lower than the 40:60 target.

A study by the authors prior to the current financial crisis had highlighted the difficulty of achieving the 2% goal (Berman and Ahuja 2008). With the revised estimates of GDPs due to the current economic recession, the 2% would only be achievable (scenario 2) if states' increase their health allocations by over 22% every year. This scenario (scenario 2) is unlikely, considering the fact that the actual allocations so far have not kept pace with the planned central allocations and, moreover, the actual spending has been lower than the actual budget allocations. (Of course, the economic slowdown affects both the states and the center.) As we shall see later, there is also evidence of absorptive capacity constraints in the sector.

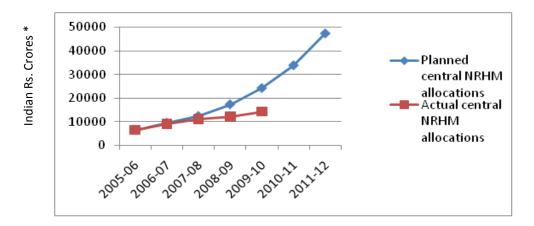


FIGURE 2: PLANNED VERSUS ACTUAL CENTRAL NRHM ALLOCATIONS

The Figure 2 above shows that there is already a significant gap between the planned central NRHM allocations and the actual NRHM allocations. If the trend is sustained, this gap will widen by the end of 2011-12. It's worth noting that non-NRHM central allocations have actually grown more quickly than projected, by almost 20% per annum in contrast to the 10% assumed in the above scenarios. This may reflect other competing

<sup>\*1</sup> crore = 10 million

<sup>&</sup>lt;sup>6</sup> There is a slight double counting in the above analysis and the analysis later in the paper, on account of a small percentage of central NRHM funds flowing through state budget which gets captured twice: in central allocations as well as in state allocations.

<sup>&</sup>lt;sup>7</sup> This also questions the usefulness of defining health financing goal as certain percentage of GDP.

demands on central funds which are receiving attention, such as the development of new national tertiary care institutions (Duggal 2009).

Can the states realize such large increases in health spending – to the order of 22-38% per annum as calculated above – so as to attain the central government's goal of health spending being 2-3% of GDP by 2011-12?

Going by the elasticity of government health spending to GDP, it is unlikely that government health spending would grow at the rate needed to achieve the goal of 2-3% of GDP. Using data from 1990-2007, the elasticity of overall (i.e., center and state) nominal government health spending to GDP in India was estimated to be about 0.94 (Figure 3). This is low when compared with other countries: the average elasticity being 1.16 for all low-income countries. There is a marked difference between the elasticity of central health spending versus aggregate state health spending to GDP in India: the former is much higher, to the order of 1.15 and close to the average for low-income countries, while the latter is only about 0.87 implying that state health spending has grown at a lower rate than GDP growth.

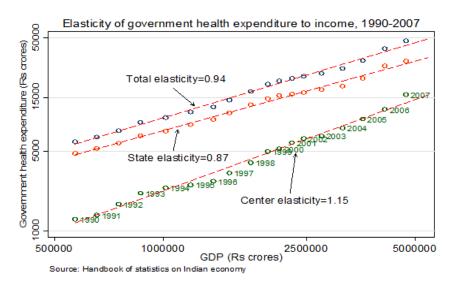


FIGURE 3: CENTRAL AND STATE HEALTH EXPENDITURE SHARE OF GDP, 1990-2007

Given the economic slowdown, revenue accruals of both central and states are likely to come down. With the decline in revenue resources of the central government, both tax devolution and non-plan grants by the center are beginning to decline (Ganguly 2009). A countervailing factor is that as states implement the recommendation of the Sixth Pay Commission it will significantly increase their salary and pension bill with a likely higher proportional effect on health since it is a labor intensive sector. Increasing health spending through higher wages and benefits however does not translate into increased

<sup>&</sup>lt;sup>8</sup> An elasticity of 0.94 implies that a 1% increase in GDP is associated on average with a 0.94% increase in government health expenditure.

<sup>&</sup>lt;sup>9</sup> This is based on data from 1995-2007.

effectiveness nor does it represent a higher priority being given by the states to health. It would, however, further squeeze the fiscal space available with the states for discretionary health spending. Against this backdrop increasing states' health allocation by 22% every year in the next few years may prove to be difficult.

### RECENT EXPERIENCE WITH BUDGETING AND SPENDING GOVERNMENT HEALTH ALLOCATIONS

In this section we examine how the aggregate health sector allocations and spending have behaved particularly post-NRHM, and study the NRHM allocations and spending in some detail.

It is important to clarify the terms we use here to analyze government health spending in India. We use the term "budgets" or "allocation" to refer to planned spending amounts - what in India are called budget estimates. These are often revised during each fiscal year based on revenues realized on other demands on fiscal resources. NRHM is mostly a centrally-financed scheme, so it is possible to estimate the actual transfer of funds to the states – which we refer to as "releases:. The Center's releases to the states are not the same as actual spending, since the states have in turn to spend the money. We use the term "utilization" to refer to reported actual spending, including that by the center directly and by the states and local government with devolved funds. Data on releases and utilization often lags budget data by one or two years, making current analysis difficult.

While the central and state health allocations have more than doubled in the four years of NRHM compared to 4 years preceding NRHM, the growth has not been as much as that envisaged to achieve the 2% goal. The average annual increase in central health allocations has been 21.1% during 2005-06 and 2008-09, while state allocations have increased on average by 16.3% per annum over the same period. The share of the center in total public health allocations has reached only 32% in 2008-09. NRHM accounted for almost 66% of total central health allocations in 2008-09. The average annual growth rate of NRHM budget allocation has been around 22% when it should have been over 30% per annum according to state plans.

Health sector allocations disaggregated by year gives a richer account of the growth at center and state level. The central government health budget experienced dramatic growth from 10.7% in 2004-05 to 26.6% in 2005-06, and thereafter maintained a growth of over 20% in 2006-07 and 2007-08. The growth declined to 14.3% in 2008-09. The latest budget shows the central health budget up by 25.5% in 2009-10. Although the growth of the health budget is the result of government policy, the increases have been lower than envisaged. In looking at budget estimates made at the state level, a similar increase is observed, though the growth started not before 2005-06 and hovered around 17% to 18%. The growth in states' health budgets is lower than needed to achieve the 2% goal.

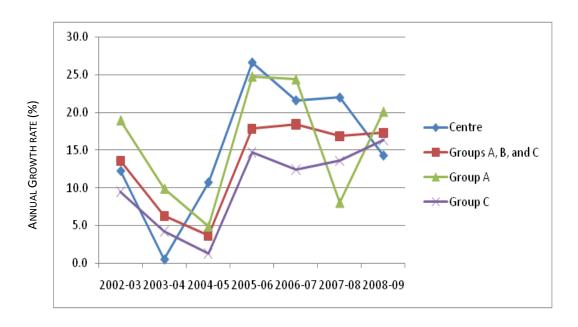


FIGURE 4: GROWTH RATE OF HEALTH BUDGET ESTIMATES

Figure 4 above decomposes this trend for the different groups of states. In this figure, Group A represents the average of 10 large NRHM focus states, Group B represents the average of 8 northeast states, and Group C represents the average of 10 large NRHM non-focus states (see footnote 1 for a list of states in Groups A, B and C). The categorization of high focus states is made by NRHM norms, which allow for preferential treatment in allocations of NRHM funding, as well as relaxed norms for implementation of NRHM.<sup>10</sup> We use this differentiation to assess if the introduction of NRHM in 2005 had an observably varied impact on the state-wise allocations to the health sector between those NRHM focus and non-focus states. Between 2006-07 and 2007-08, growth in budget allocations to the health sector steadily decreased in Group A states, with increases seen again in 2008-09. While this is initial data, it is possible that an increase in central health allocations through the NRHM program may be the reason for the lowering of growth in state-wise health budget allocations. Additionally, the growth rate as well as the variation in growth rates in Group C states is not as large as in the Group A states, where NRHM funding is larger. NRHM is intended to provide additionality to state budget allocations, and should not act as a substitute for already allocated state health funding. These trends raise concerns of potential substitution of state health funds with centrally allocated NRHM funding and should be monitored as additional data becomes available. In a recent press statement, the new health minister has expressed his concern over states not increasing their health budget and instead substituting central funding (HT 2009).

<sup>&</sup>lt;sup>10</sup> The allocation of NRHM funds from the center to the states is primarily based on the 2001 population of each state. In addition to population, a weight has been assigned to priority states deemed to be in greater need of resources for health. High-focus non-northeastern states are assigned a weight of 1.3, high-focus northeastern states are assigned a weight of 3.2 and all other states have a weight of 1 (NRHM Framework 2006).

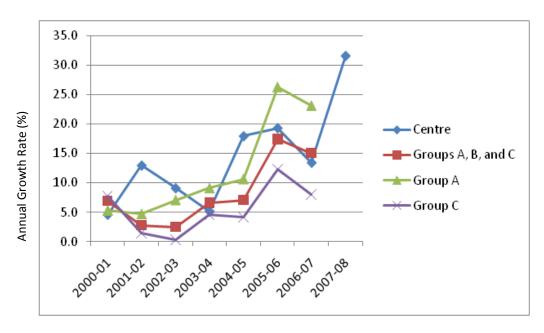


FIGURE 5: GROWTH RATE OF GOVERNMENT HEALTH SPENDING

With regard to actual health spending rather than budget allocation, the information is available with some lag. State level information is available for the first two years of NRHM i.e., 2005-05 and 2006-07, and for the center the information is available also for the year 2007-08. As shown in Figure 5, there has been a distinct increase in both central and state health spending in the post-NRHM period compared with the years immediately preceding NRHM. In fact, growth in central spending started to increase in 2004-05—a year prior to NRHM reflecting response to years of low real spending growth and improved fiscal conditions in the states. However, in 2006-07, the growth in both central and states health spending slowed. This was probably due to capacity constraints which are now beginning to get addressed. Growth in spending is higher for Group A states than for the Group C states suggesting some evidence that the poorer states catching up with the better off states.

It is important to note here that increased state health allocations and spending for at least some of the Group A states is in part due to the Twelfth Finance Commission (TFC) grants. TFC identified seven most needy states and awarded them yearly grants for a period of 5 years from 2005-06 to 2009-10. These grants preceded the government's statement of the objective reaching 2-3% of GDP. On a per-capita basis this grant on average amounted to Rs. 136.6 (or \$2.7) but with significant variation among the selected states: from Rs. 348.3 (or \$6.9) in Assam to Rs. 28.4 (or \$0.6) in Madhya Pradesh (GOI

<sup>&</sup>lt;sup>11</sup> Inter-fiscal transfers in India occur through different channels. Whereas the Finance Commission – an independent authority appointed by the President every five years – has a mandate to decide how central revenues are to be shared across the states, there are other modalities of transfers: via the Planning Commission for funding planned development objectives and through center-state ministerial transfers which are funded wholly by the center (central sector projects) or those requiring states to cover a proportion of the costs (centrally sponsored schemes, such as NRHM). About two-thirds of all center-state transfers are mandated via the Finance Commission with the remaining shared equally among Planning Commission and intra-ministerial center-state transfers ().

<sup>&</sup>lt;sup>12</sup> These states are: Assam, Bihar, Jharkhand, Madhya Pradesh, Orissa, Uttar Pradesh and Uttarakhand.

2004, Berman and Ahuja 2008). The Thirteenth Finance Commission, which is in the process of submitting its recommendations to the Government of India, may provide additional grants for health, again, to the weaker states for achieving horizontal equity in health. This is potentially another important source of strengthening states' shares in government health spending which should be considered in the governments overall health financing strategy.

#### **NRHM Implementation and Absorptive Capacity**

Can NRHM deliver the increasing pace of implementation implied by its funding plan? Increased central funding for health under NRHM will require improved capacities especially at the district level and below. Absorptive capacity in states and districts reflects specific factors around the demand for and supply of service delivery. On the supply side, the constraints relate to inadequate infrastructure, limited technical, administrative and managerial capacities to plan and execute a program, and issues of incentives and accountabilities. On the demand side, lack of education, limited information, and socio-cultural factors pose constraints.

NRHM's design encourages bottom up planning, which can slow implementation. It also emphasizes strengthening public provision of health care with limited attention to trying alternate health service delivery models such as contracting out which could yield action more quickly. NRHM was rolled out on a national scale without having been piloted. As a result, the understanding of what it would take to implement the program is gradually building up as the program implementation gets underway. Some evidence suggests that, at least so far, NRHM allocations have exceeded absorptive capacities in many states.

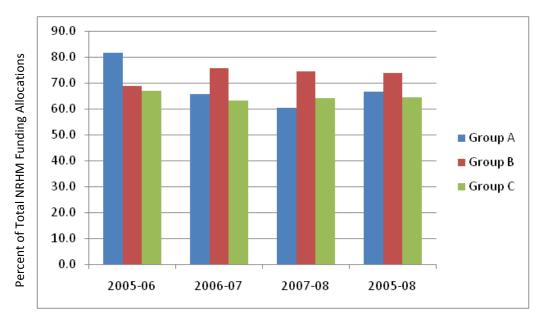


FIGURE 6: RELEASES OF NRHM FUNDS AS PERCENT OF ALLOCATIONS

<sup>&</sup>lt;sup>13</sup> Using exchange rate: 1USD=Rs. 50.

An initial step in assessing the success of NRHM implementation is a simple expenditure analysis. Figure 6 shows the percent of total NRHM allocations at the state level that are actually released. The data highlight that release levels are far below allocations in all three groups of states. Furthermore, in Group A states, releases as a percent of allocations have decreased over time. As allocations are rising (even though, not fast enough to keep up with the envisaged plan), the proportion of that amount actually released to the states is not showing a similar increase. This suggests a problem with the states either in complying with the modalities involved in the release of the funds or in their capacity to absorb the allocated funds.

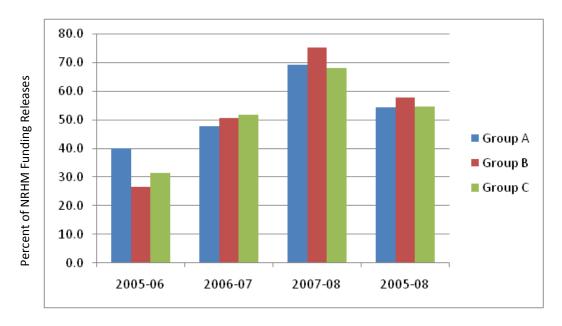


FIGURE 7: UTILIZATION OF NRHM FUNDS AS PERCENT OF RELEASES

Figure 7 shows the percent of total NRHM releases at the state level that are actually spent. Expenditures on NRHM as a share of releases have steadily increased in all three groups of states between 2005 and 2007. It is not surprising that initially states were not spending a large portion of NRHM funding releases. It can take time for a program such as NRHM to become established and the appropriate management and procedural structures to be put into place. While expenditure levels remain well below release levels, the steady increase in utilization of funds shows an increased implementation capacity within the NRHM program. There does not appear to be large differences between the groups of states in their ability to spend the released funding for NRHM. However, in Group A states, given the decrease in releases as a share of allocation, expenditures as a share of total allocations increased from 32% in 2005-06 to only 41% in 2007-08. Thus, while Group A states get lower releases relative to the planned allocations under NRHM, these states on average have been better able to spend the money that was released.

The special treatment of Group A states is intended to compensate for relative inequities between those states with higher income per capita and better health outcomes, and poorer states with worse health outcomes. However, examining NRHM allocations as

well as actual spending, we do not find much difference between Group A and Group C states. Total NRHM expenditure during 2005-08 per rural population was approximately Rs 167 in non-focus large states and only Rs. 163 in high focus non-northeast states. <sup>14</sup> It is instructive to note here that even NRHM allocations per rural population do not differ much either between Group A and Group C states. Aggregate NRHM allocations for 2005, 2006, and 2007 were Rs 353 per rural population in Group A states and Rs 342 in Group C states. Even though NRHM tries to improve equity by making higher per-capita allocations to focus states, these allocations are not significantly higher on the basis of the rural population size for whom the program is ostensibly designed.

Disaggregation of NRHM funding into major sub-categories yields some additional insights. Most new activities under NRHM fall under the NRHM flexible pool, while other three sub-categories — RCH flexipool, National Disease Control Program (NDCP), and Immunization — all existed prior to NRHM, but have now been subsumed and given higher allocations under NRHM. The data in Figure 8 below are the average release as a percent of allocations. NRHM flexipool consistently has the highest rate of releases as a share of allocations across all three groups of states. This rate is above 100% in all cases. Immunization releases also exceed allocations in Group A and B states, whereas releases for RCH flexipool and NDCP are well below allocations.

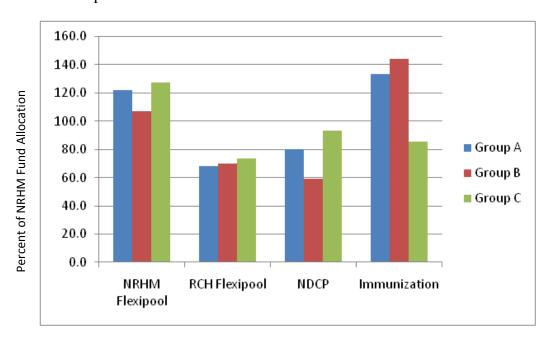


FIGURE 8: RELEASE OF NRHM FUNDS AS PERCENT OF ALLOCATIONS BY MAJOR SUB-CATEGORIES

Figure 9 below show the average actual expenditures as a percent of releases between 2005-06 and 2007-08.

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<sup>&</sup>lt;sup>14</sup> Total NRHM expenditure for 2005, 2006, 2007 for the different state groups divided by total rural population of those states in 2006.

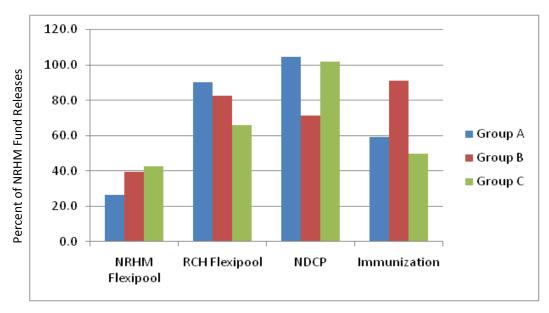


FIGURE 9: Utilization of NRHM funds as percent of Releases by major sub-categories

Despite the high rate of releases to NRHM flexipool, expenditures as share of these releases are consistently low in all three groups of states. Group A states have the lowest rate of expenditures, at just 32% on average. Even though, Group C states are the best able to spend the money released to them for NRHM flexipool, their utilization rate is less than 60%. In a way, the gap between the release and actual spending under NRHM flexible pool, which consists of new set of activities, is understandable. But significant gap in other ongoing sub-categorizes is suggestive of real limits on execution capacity of all states, suggesting the need to focus on capacity building of the states to ensure effective utilization of the NRHM funds.<sup>15</sup>

#### **Is Increased NRHM Spending Improving Health Programs?**

NRHM's purpose is to improve health outcomes in rural populations, with a particular focus on primary care. It is too early to link NRHM expenditures to health outcomes definitively. However, given the large focus of NRHM on reproductive and child health, in particular, on making incentives payments for promotion of institutional deliveries, it may be worthwhile to examine the impact NRHM has had on the percentage of women delivering babies in an institution. We utilize recently released DLHS-3 survey data for this analysis. Figure 10 shows the change in the percent of institutional deliveries between 2002-2004 and 2007-2008 versus total RCH expenditures per rural population made between 2005 and 2007 under NRHM. We see that there is a positive correlation between the amount of RCH funding per rural population and the increase in institutional deliveries. One could infer that NRHM is potentially contributing to the increase in institutional deliveries. However, when we disaggregate this trend, we observe that Group A states are not necessarily doing better than Group C states in improving the

<sup>&</sup>lt;sup>15</sup> The NRHM funds that are released but not utilized continue to remain with the states/districts. The unspent balances lying with states/districts are taken into account in the release in the subsequent period.

percentage of institutional deliveries. This could be interpreted as raising doubts about the causality between NRHM and improved institutional deliveries or perhaps NRHM is helping lower performing states approach the level of the better performing states. We also compare RCH expenditures per capita to the percentage change in institutional deliveries and found a similar positive trend, but that Group A states had higher changes than Group C states. This larger percentage change may be due to the initially much lower levels of institutional deliveries in 2002-2004 in Group A. These results are somewhat promising with regard to institutional deliveries. A similar correlation does not exist when comparing the immunization pool of NRHM expenditures and the change in the percentage of children receiving full immunizations.

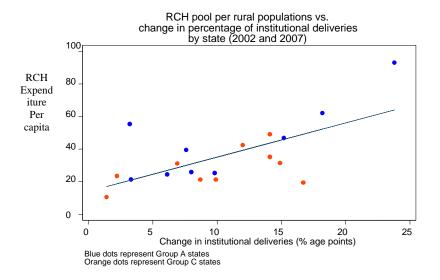


FIGURE 10: RCH POOL PER RURAL POPULATION VERSUS CHANGES IN PERCENT OF INSTITUTIONAL DELIVERIES, 2002-2007

Analysis of the actual use of NRHM expenditure in several states suggests that these funds are being used for variety of purposes and on variety of activities which were either unfunded or underfunded prior to NRHM demonstrating at least the intent that these expenditures be additional. Since NRHM activities are largely complementary to the pre-existing service delivery programs, the intent is clearly to increase the effectiveness of government health service delivery although we cannot demonstrate that causal relationship with evidence of improvement outputs.

Table 1 below shows NRHM expenditure on 3 major heads viz., RCH Flexi-pool, NRHM flexi-pool and Immunization during 2008-09 as reported by the states. Besides these three heads, expenditure under NRHM includes expenditure on two other heads namely, national disease control programs and infrastructure maintenance. Funding to the latter two heads has been going on even prior to NRHM. What's really new to NRHM are the activities in NRHM flexi-pool and, to some extent, under RCH flexi-pool. Around 58% of all NRHM allocations to Group A, B, and C states in 2008-09 went to the 3 heads shown in table below. A significant part of NRHM expenditure occurred under the two flexi-pools. Expenditure on promotion of institutional deliveries through cash payments

to expectant mothers and accompanying health workers, Janani Suraksha Yojana (JSY), takes a sizable part of expenditure under RCH pool. Likewise, significant expenditure is being made on a number of new activities such as selection and training of village health activist called ASHA, untied grants to health facilities to allow flexible funding of local needs, physical up-gradation of health facilities, corpus grants to patient welfare societies at the facility level and so forth. Most of these expenditure items are expected to support improvements in existing service delivery which were not financed by the states previously. (Upgradation to physical facilities is one exception to this) Note that the total expenditure under the major heads is higher than the amount released which is due to unspent balances lying with the states.

Table 1: NRHM Expenditure during 2008-09 (In Rs. Crores)

		State Groups	
Expenditure Items	Group	Group	Group
_	Α	В	C
1. RCH Flexi-pool, of which	1687.7	215.4	898.2
Janani Suraksha Yojana	964.0	72.1	203.3
(JSY)			
2. Mission Flexi-pool, of	1138.2	633.5	1840.1
which			
ASHA (selection,	135.2	17.6	99.6
training, kits)			
Untied Funds	204.9	42.0	266.8
Hospital Strengthening	67.8	84.8	324.9
Annual Maintenance	44.8	10.7	63.3
Grants			
Corpus Grants to	72.3	12.6	89.2
RKS/HMS			
Additional Contractual	94.8	63.4	94.8
Staff			
3. Immunization	372.3	35.3	120.8
Total Expenditure	3198.2	884.3	2859.1
Total Releases	2960.0	677.7	1972.1

Source: NRHM Website: http://www.mohfw.nic.in/NRHM.htm

One area where NRHM could innovate to improve the linkage between increased spending and results would be to tie expenditures more to measured increases in outputs and outcomes. Specifically, all three types of innovative grants viz., untied grants, maintenance grants, and grants to facility level "patient welfare committees," are based on input-related norms as opposed to performance in terms of outputs. Increased spending, linked to inputs, is expected to support local level decision making to improving health service delivery. NRHM should consider how to link these innovative grants to outputs like quality-adjusted patient load or population coverage to improve

results. Given the gaps between allocations, releases, and actual expenditures, there is probably some room for bonus payments tied to performance.

Likewise, there are certain processes which are posing bottlenecks in the smooth implementation of NRHM. For example, since the NRHM funds are routed through state health societies and not through the conventional treasury mechanism, the current system of linking release of funds to the checks and balances in the utilization of funds could be improved. The current method of releasing funds does not make a distinction between recurring expenditure and capital expenditure. Very often, utilization certificates for capital expenditure are furnished with some lag which delays release of central funds (for both capital and recurring expenditures) which in turn adversely affects recurring expenditures to be incurred by states. Rationalization of such processes could enhance the program implementation.

<sup>&</sup>lt;sup>16</sup> The first tranche (up to 75%) of approved central outlays is released on receipt of provisional utilization certificate of the funds released during previous year, taking into account the unspent balance lying with a state. The second tranche of 25% is released after the receipt of audited statements and audited utilization certificates for the funds released during previous year. This process of fund release conditional on the submission of utilization certificate does not distinguish between capital and recurring expenditures.

#### **CONCLUSIONS**

By setting a goal of increasing government health spending to 2-3% of GDP and launching its ambitious National Rural Health Mission, the GOI has expressed a strong commitment to health. Government health spending has indeed increased. This focus on health is likely to continue following the Congress party's 2009 election win.

However, fulfilling this commitment has implications for both center and state funding of health care in India. The analysis presented in the paper suggests that given India's decentralized governance – with a large share of government health spending occurring at the state level – realizing the goal of 2-3% of GDP would require that states on aggregate would need to increase spending on average by 22-38% per year to attain this target. Achieving this target is unlikely, both because of the fiscal implications of such large increases as well as the difficulties in actually spending rapidly increased budgets.

From the available data, we see that the states have not been able to fully utilize additional funding provided by the central government, slowing NRHM implementation. The constraints are primarily related to the states' capacities to scale up the program at the pace initially planned. They include cumbersome procedures slowing fund disbursements; lack of availability of additional inputs such as human resources; weak motivation; and weak capacities to plan and execute plans. NRHM was rolled out nationwide, more or less in one go without piloting the program. A number of key NRHM actions, such as ASHA recruitment and training, were developed as implementation proceeded. Focused assessment on these issues, for example, b comparing districts with better and worse NRHM implementation in the same states, would improve understanding of how to accelerate NRHM scale-up.

There is some preliminary indication that scaled up NRHM spending may be improving health service programs and coverage, possibly helping reduce gaps between lagging and more advanced states. NRHM is designed both to strengthen existing infrastructure as well as add capacity for better service delivery. Much more analysis of the contribution of these additional inputs is important for enabling greater realization of this potential. Greater emphasis on innovative ways to link increased government funding to better performance could also help increase results.

In a federal fiscal structure such as India's, a rapid increase in funding from one source of government spending, in this case the center's budget, can lead to unintended consequences in other sources of government spending such as the states. We continue to be concerned that NRHM's dependence on central grants may create incentives to states to reduce their own health expenditures, especially on lower level services. NRHM tries to address this problem through conditionality, i.e. requiring states to increase their own spending at a specified rate in tandem with increased central funding. However, given India's complex government financing structures, these conditions are difficult to monitor. States have discretion over the budget allocations as well as disbursements. With flexible grants to states they also may have some discretion on whether to use center or state funds for specific expenditure. The center's ability to monitor some of these results may be delayed by government accounting processes. The evidence

available so far suggests that some degree of substitution has appeared in aggregate, with variation across individual states. This issue bears close monitoring, especially with the advent of some economic slowdown which will certainly impact state budgets. NRHM's laudable goal of significant increases in government health spending should not be vitiated by fiscal gaming between different levels of government.

A longer-term issue concerns India's strategy for government financing of health. The center's plans as currently outlined in the 11<sup>th</sup> Five Year Plan envisages a substantial increase in the total share of the center's financing of government health expenditure as overall government expenditure increases. Yet the states remain the owners and operators of almost all of the government health care delivery system. If NRHM (as well as the proposed National Urban Health Mission) are successful, one result will be a major increase in the volume of services provided by the government health care facilities, with related increases in recurrent costs such as those for drugs and supplies and future human resources costs. Will the center continue to support increased state-level spending? Would this be done through plan mechanisms as it is now or non-plan mechanisms? Or will states be expected to significantly increase their own plan or non-plan spending when the current mission ends?

Government of India should be credited with reversing a long trend of declining government effort to address health problems. It has coupled action to increase budgets with an ambitious goal – doubling or tripling government health expenditure as a percent of GDP. Having an explicit financing goal has value in political terms, when the government is spending very little on health care. However, it is also important is to ensure that the additional financing indeed gets allocated and spent, and gets spent effectively on buying the right kind of outputs and outcomes consistent with government stated priorities. The evidence to date indicates that a commitment to increasing government health spending may be necessary but is not sufficient to achieve the government's goals. The absorptive capacity in the states, that is, the capacity to plan and implement, is an important constraining factor. India's experience brings out rather well that just committing resources is not enough. Resource commitment for health must go hand-in-hand with the capacity to utilize those resources effectively, which calls for addressing existing inefficiencies, trying alternative approaches to service delivery, and possibly a greater focus on outputs and outcomes.

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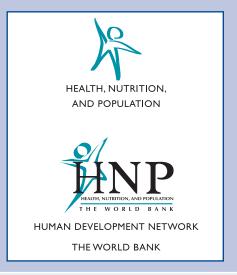
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