India's Health Financing Initiative:
Financing Issues and Options

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Will economic growth automatically lead to health improvements?

- Throughout the world and over time, health improvements have generally gone hand-in-hand with economic gains.

- The famous Preston curve (association between life expectancy and per capita GDP) is observed in India as well.

- But …

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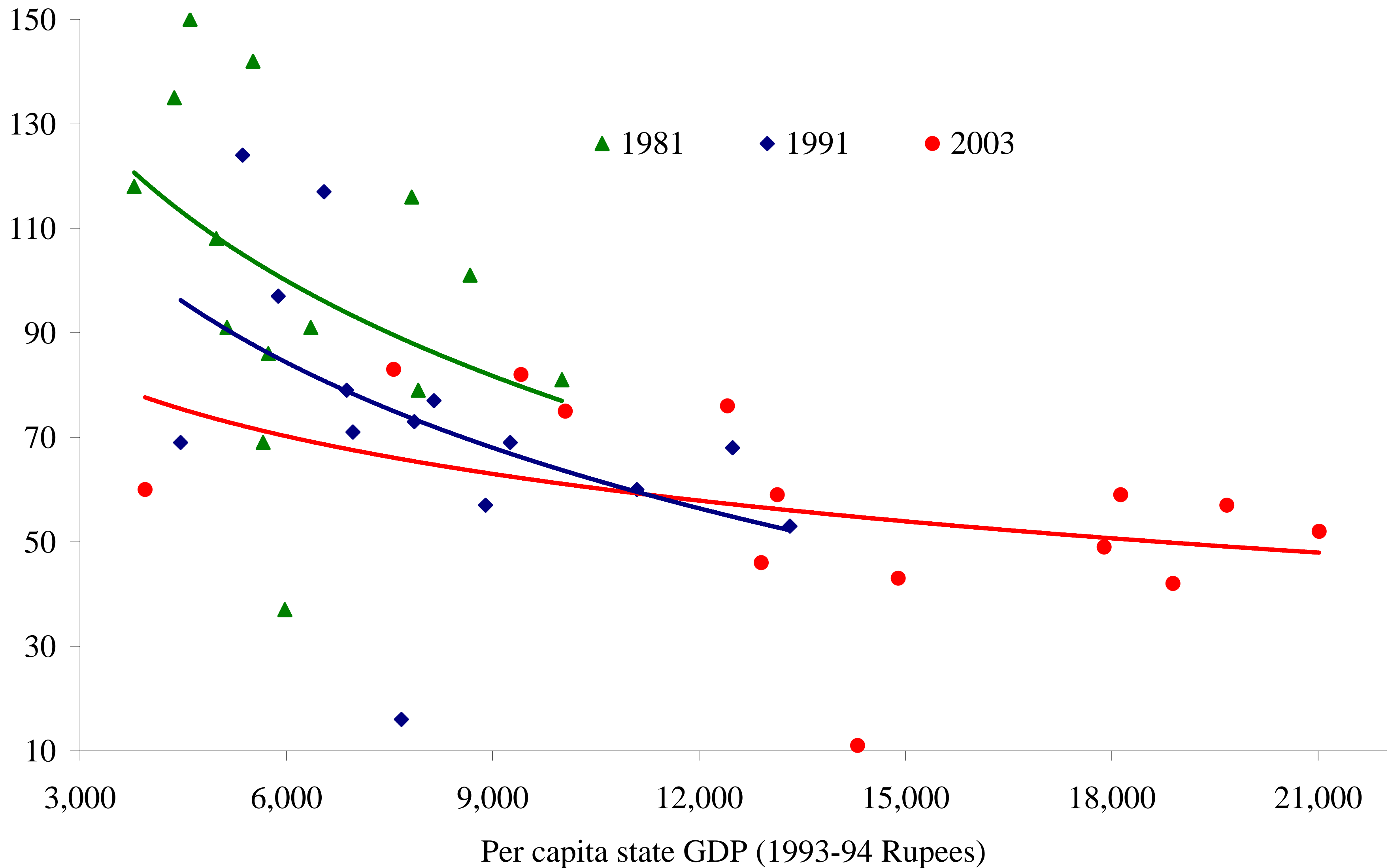
Relationship between infant mortality rate and real state GDP per capita across states, 1981, 1991 and 2003
1981
1991
2003
150
130
110
90
70
50
30
10
3,000
6,000
9,000
12,000
15,000
18,000
21,000
Per capita state GDP (1993-94 Rupees)

- Infant mortality was highly responsive to economic growth in the 1980s and the 1990s.
- But the Preston curve has flattened significantly by the 2000s.
- This suggest that economic growth alone is likely to lead to limited mortality declines in the future.
- This highlights the increasing importance of public action in further mortality reductions.

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Public Spending on health in India

- Public spending on health in India is extremely low by international standards

- However, it is not very low by South Asian standards.

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Public expenditure on health per capita in relation to per capita income, all medium and high human development countries, 2003

Public exp on health per capita (PPP $)

450
400
350
300
250
200
150
100
50
0

0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
10,000
11,000
12,000
13,000
14,000

Per capita GDP (PPP $)

India

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% of GDP

9
8
7
6
5
4
3
2
1
0

1998 – 2002 1998 – 2002 1998 – 2002 1998 – 2002 1998 – 2002 1998 – 2002 1998 – 2002

India Pakistan Nepal Sri Lanka Afghanistan Bhutan Bangladesh

total private expenditure/GDP total government health expenditure/GDP

Source: WHO 2001.

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Public versus private spending

- It is only public spending on health that is very low in India.

- Private spending compensates for this low level of public spending, and is rather high.

- Indeed, India has one of the highest private/public ratios of spending in the world.

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% private share in total health expenditure in relation to per capita income, all medium and high human development countries, 2003

90
80
70
60
50
40
30
20
10

% private share in total health expenditure

India

0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
10,000
11,000
12,000
13,000
14,000

Per capita GDP (PPP $)

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State variations

- There are very large variations in public spending on health across states.

- In general, states that have more public spending tend to have lower private spending, suggesting that public spending “crowds out” private spending.

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Public spending on health as % of state gross domestic product, 2001-02

State	% of state GDP
Himachal Pradesh	2.0
Jammu & Kashmir	1.7
Bihar	1.6
Assam	1.4
Rajasthan	1.2
Orissa	1.2
Kerala	1.1
Karnataka	1.0
Madhya Pradesh	1.0
West Bengal	1.0
Andhra Pradesh	0.9
Punjab	0.9
Tamil Nadu	0.9
Uttar Pradesh	0.8
Maharashtra	0.7
Gujarat	0.6
Haryana	0.6

0.5 0.8 1.0 1.3 1.5 1.8 2.0

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Relationship between public and private health expenditure per capita, across states, 2001-02

Per capita private exp. on health (Rs.)

1,700
1,500
1,300
1,100
900
700
500
300
100

50 150 250 350 450 550 650 750 850

Per capita public exp. on health (Rs.)

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- But in the Indian context, the 'crowding-out' effect of public spending is a good thing, since it will reduce the burden on households who have no option but to bear the major burden of health-care expenditure, since the public sector is unable to finance or provide adequate amounts of basic health services and infrastructure.

- The high out-of-pocket expenditure on health care is an important cause of household impoverishment in India.

- In addition, there is strong evidence that private spending on certain types of health interventions is highly inefficient and results in cost escalation.

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Change in poverty incidence when out-of-pocket health payments are excluded from total cons. expenditure, 11 Asian countries, circa 2000

change in headcount at the $1 poverty threshold (%)

4%
4%
3%
3%
2%
2%
1%
1%
0%

Bangladesh
India
China
Nepal
Vietnam
Indonesia
Philippines
Sri Lanka
Thailand

30% 40% 50% 60% 70% 80%

Out-of-pocket share (%) of total expenditure on health

Inefficiency of private spending on certain treatments

- A number of studies in India have documented the inefficiency of private expenditures on tuberculosis treatments (Duggal and Amin 1989, Uplekar 1989, van der veen 1991, Bhat 1993) because private-sector health workers have a strong incentive to prescribe more expensive treatments instead of the standard, recommended drug regimens.

- This leads to severe cost escalation. This has been the experience of China as well as the United States.

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NRHM

- A central goal of the NRHM is to increase public spending on health from the current 1.1 percent of GDP to roughly 2-3 per cent of GDP within the next five years, with most of the spending on ‘focus’ states.
- This would bring India more in line with the “norm” for other developing countries.

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Several questions relating to additional public spending

– Will it be even possible to ramp up spending to that level?

– Will the additional spending have an impact on health outcomes?

– How should the money be spent?

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History of public spending on health in India

- Before economic reforms of the 80s, public spending on health in India had peaked at about 1.6 per cent of GDP.
- During the 1990s, government health spending did not keep up with the expanding economy and budget, with the result that by 2001 public spending on health constituted only 0.9 per cent of GDP.
- These numbers fell further to 0.8 per cent by 2005.

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Feasibility of ramping up spending

- The 2006-07 budget has reversed this trend, and substantially increased allocations to the social sectors (education, health, and women and child development).
- In the Common Minimum Program (CMP), the present UPA government has committed to spending 3% of GDP on the health sector before its term ends in 2008-09.
- Assuming that the Indian economy continues to grow at its current rates, 3% of the projected GDP (of Rs. 52,000 billion in current prices) will constitute Rs. 1,500 billion.
- The budget estimates for 2006-07 call for the central government to spend Rs. 130 billion (including in central grants to states) and for the states to spend roughly Rs. 285 billion.

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- In other words, the commitment of 3% of GDP to health spending would call for a quadrupling or quintupling of what the central and state governments currently spend on health.
- Given that the share of the central government in public health spending is only 20-35%, realization of the CMP goal will be difficult with even increases of 30-50% per annum in central government health expenditure over the next few years.
- Yet at the same time, there is the recent precedent in the education sector of the central government assuming a much larger share, relative to the states, for its priority developing objective.

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Effectiveness of additional spending

- Using a crude measure, India actually is more efficient than the average low/medium income country in the world in obtaining a lower infant mortality rate for the amount its public sector spends on health per capita.

- Of course, there is scope for further improvements in efficiency (e.g., see Bangladesh).

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Infant mortality rate in relation to public expenditure on health per capita, all medium and high human development countries, 2003

Infant mortality rate (deaths per 1,000 live births)

160
140
120
100
80
60
40
20
0

India

Bangladesh

0 50 100 150 200 250 300 350 400 450

Government health expenditure per capita (PPP $)

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Cross-state evidence on spending effectiveness

- There is some evidence based on pooled state for 20 states for 20 years (1980-2000) that public spending has a strong effect on improving health outcomes.
- This is especially true in the EAG states.

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Effects of increased public spending on health across states

Estimated effects of real public expenditure on health per capita on infant mortality rate (IMR) reduction, by real gross state domestic product per capita

Real gross state domestic product per capita (in 1993-94 Rupees)

4,500 5,000 5,500 6,000 6,500 7,000 7,500 8,000 8,500 9,000 9,500 10,000 10,500 11,000

0.10
0.00
-0.10
-0.20
-0.30
-0.40
-0.50

% decline in IMR due to a 1% increase in real public exp on health per capita

Absolute decline in IMR due to a Re. 1 increase in real public exp on health per capita

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Why are effects of public spending greater in the poor states?

- There is still an unfinished agenda of “easy interventions” – vaccinations, ORT, etc. – in the EAG states. These are highly inexpensive and cost-effective, so you get a very big “bang for the buck”.

- In the non-EAG states, the required interventions – institutional care, emergency obstetric care, etc. – are much more expensive, so you get a smaller “bang for the buck.”

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How should the money be spent?

- The additional money should be spent on highly-select interventions that are cost-effective and that disproportionately benefit the poor.

- The CEA can be used as a tool to identify the interventions – the minimum package – that should be financed by the government.

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Geographical focus

- It is also important to focus the spending tightly on the regions of greatest need.
- NRHM currently calls for a focus on 18 states. Our feeling is that the 18 states may be too many, with several states not belonging in this list.
- For instance, Himachal Pradesh has one of the highest state GDP per capita in the country, has relatively good health indicators in comparison to most states, and has the highest public expenditure on health as a share of its GSDP (2 per cent). As such, there is little reason to include Himachal Pradesh in the initial phase of the NRHM.

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- This initial phase could be targeted to the four states (UP, MP, Bihar and Rajasthan) that together account for more than one-half of all the infant deaths in the country.
- Likewise, it is not necessary to target NRHM interventions to all the districts in these states.
- An intervention program that initially focuses on just 100 of the districts having the largest absolute number of infant deaths in the country (out of a total of 602 districts) would be more effective than one that is spread thinly over all the 602 districts.

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Contribution of the 21 larger states to national infant deaths, 2000

Cumulative contribution (%)

- ☐ Cumulative share in total number of infant deaths nationally
- ■ Share in total number of infant deaths nationally

State	Share in total number of infant deaths nationally	Cumulative share in total number of infant deaths nationally
Uttar Pradesh	25	25
Madhya Pradesh	9	
Bihar	9	43
Rajasthan	8	
Andhra Pradesh	6	57
Maharashtra	5	
Orissa	5	67
West Bengal	5	
Gujarat	4	76
Karnataka	4	
Tamil Nadu	3	83
Assam	3	
Jharkhand	3	89
Chhatisgarh	2	
Haryana	2	93
Punjab	2	
Jammu & Kashmir	1	96
Delhi	0	
Uttaranchal	0	
Himachal Pradesh	0	
Kerala	0	97

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Cumulative distribution of infant deaths in India across districts, 1994-98

Cumulative % of national infant deaths

100
90
80
70
60
50
40
30
20
10
0

0 10 20 30 40 50 60 70 80 90 100

Cumulative % of districts (ranked by absolute number of infant deaths)

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Scope of community-financing schemes in financing health

- Lot of interest in recent years in community risk-pooling and social insurance schemes.

- There are a large number of community-based health insurance schemes that operate in India. Most of these schemes are organized by NGOs and community organizations, and are relatively small in terms of their coverage. Some of the better-known ones include SEWA, Karuna Trust (Karnataka), Mayapur (West Bengal), and KKVS (Theni district, Tamil Nadu).

- A number of health professionals and policy makers have advocated community-based health insurance schemes as a solution to the health-care financing problems of low-income countries.

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- Since 2003, GOI is offering a Universal Insurance Scheme (UIS) targeted at the poor. The UIS provides hospitalization benefits, but excludes conditions related to pregnancy and delivery. It charges a premium of Rs. 365 per year ("a rupee a day") per individual, with discounts offered for groups and large families.
- Despite the fact that fairly attractive premium subsidies are offered to low-income individuals (e.g., subsidy of up to Rs. 200 for persons below the poverty line), the scheme has suffered from very low enrollment.
- The inability to generate sufficient demand for this scheme probably reflects the general paucity of health facilities offering reasonable-quality services in rural India and the consequent lack of confidence of consumers that they will receive good value for their premiums.

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- Unless you have a wide network of well-functioning health centers and hospitals – both public and private -- around the country, it is difficult for a universal health coverage scheme to be effective. People would simply not see the value in such a scheme.

- Thailand, which is one of the few middle-income countries in the world that has a successful universal health coverage scheme that it introduced in 2001, has been successful because over the last 40 years, the country has built an impressive network of functioning primary care health centers in all the sub-districts of the country and community hospitals in more than 90 percent of districts.

- Given India's lack of a comprehensive network of rural health facilities that can actually deliver quality services, the odds are against a universal health coverage scheme being very successful at this stage of the country's development.

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Issues related to the proposed additional health spending

- The additional public spending should finance priority interventions – the minimum health package – on a universal basis in districts/states of greatest need (at least initially, and eventually to cover the entire country).

- *Center-state cost-sharing*. If states cannot come up with matching funds, the central government should be prepared – at least initially – to take up the lion's share of finance for the proposed minimum package.

- In the longer run, incentives may have to be introduced to get states to increase their own spending on priority interventions.

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- What about implementation capacity? Poor states and districts often have limited absorptive capacity for additional spending and additional programs.
- Again, in the short run, it may be worthwhile for the central government to take the primary responsibility for implementation in the EAG states, primarily by continiung its vertical programs, some of which have been very successful.
- There is a precedent in the education sector – the *Sarva Shiksha Abhiyan* (SSA). Under the SSA, the union government took on the primary responsibility for universalization of primary education.

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- Of course, the long-term objective has to be the development of state-level capacity for information analysis, intervention selection, program implementation, and monitoring and evaluation. This capacity does <u>not</u> have to be entirely in the public sector; it should include the private and the NGO sector.

- This will naturally take time, especially in the weaker EAG states. But the minimum program we have talked about need not wait for the development of this capacity.

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Long-term vision

- NRHM should be viewed as a first installment on a long-term plan for universal health-care *finance* (not necessarily *provision*) of a minimum package of preventive and clinical services in India.

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