

With growing emphasis on the need for pro-poor health financing, it is increasingly important to be able to monitor the impact of policy and strategy on poor consumers of health care.

While National Health Accounts are an important tool for setting out the level, sources and allocation of financial resources within the health system, they can say little about who actually benefits from the expenditure. Benefit incidence studies examine how effectively governments are able to target their limited resources towards the needs of the poor.

They provide a revealing analysis of how, for example, groups disaggregated by income or gender make varying use of primary and hospital services, in rural and urban settings.



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## Benefit incidence analysis:

how can it contribute to our understanding of health systems performance?

Mark Pearson

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The DFID Health Systems Resource Centre (HSRC) provides technical assistance and information to the British Government's Department for International Development (DFID) and its partners in support of pro-poor health policies, financing and services. The HSRC is managed on behalf of DFID by the Institute for Health Sector Development (IHSD).

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# 1 What is benefit incidence analysis?

A great deal of emphasis has been placed on the importance of National Health Accounts (NHA) as a means of promoting appropriate systems reform. However, whilst NHA provide useful information which may be important for policy making, they pose more questions than they answer. In practice, what NHA do is set out the level, sources and allocation of financial resources within the health system. They tell us nothing about who benefits from this expenditure.

Benefit Incidence Analysis (BIA) in the health sector takes us one step further by examining who benefits from expenditure on health care. It usually relates to public expenditure and is concerned with the issue of how effectively governments are able to target their limited resources towards meeting the needs of the poor (as they usually profess to do). Target groups could be defined in a number of ways – by region, age or gender – but use of services by income group, however measured, is usually of the most interest. Areas of public expenditure can also be disaggregated in a number of ways. A simple distinction could be made between inpatient and outpatient care. Alternatively, the approach might wish to disaggregate by type of facility (teaching hospital, secondary hospitals, primary health centres, community health centres etc.). The Bangladesh case study presented below, for example, highlights the advantage of such disaggregation, with a very different picture emerging in teaching and specialised hospitals. The main constraints to such disaggregation are cost and feasibility (related to sample sizes). Most NHA do not include BIA as a core component, although these are often carried out in parallel (as in the case of Bangladesh) or a BIA can be completed without an NHA (as in the case of India), although some of the tasks carried out in a NHA still need to be undertaken.

A major advantage of BIA is that it is more directly linked to the policy goals adopted by most countries. These typically relate to ensuring equitable access or its equivalent. Although BIA does not tell you how much health care a person needs, it does give you some idea of how much care they get. The findings are also particularly relevant to the poverty reduction targets set out in the International Development Targets (IDTs), as lack of access to effective health care is now well recognised as a major cause of poverty. Unfortunately, the IDTs do not have poverty-related targets associated with their health goals (with the perverse consequence that the IDTs could be achieved by only treating the better-off). If they had, the benefit incidence findings would be given greater prominence perhaps.



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## 2 Using benefit incidence analysis to help measure health systems performance

The issue of how to measure health system performance has received a lot of attention in recent years. This reflects concerns that health sectors are underperforming and are failing to give good value for money. The World Health Organisation *World Health Report 2000* (WHR) focused on this issue. Its findings, presented in part as league tables, have proved controversial and have been criticised by many. At the same time they have generated debate in this often neglected area.

One major criticism is that the WHR approach treats the health system as a 'black box'. It attempts to measure performance by investigating the link between health expenditure and five health sector goals (average health status, distribution of health status, average responsiveness, distribution of responsiveness and the fairness of financial contribution). No attempt is made to look inside the 'black box' and explain how the expenditure translates into these goals by looking at which health services are delivered and who receives them.

BIA can be used to get a better insight into the factors responsible for health sector performance. At the same time it also needs to be recognised that BIA is limited. It provides evidence on only one dimension of health sector performance, and even then the findings need to be carefully interpreted and explained.

A fuller understanding of system performance requires an even deeper analysis of the complex processes that shape health sectors. Much of the explanation is down to influences outside the control of governments, such as cultural, geographical and climatic factors. Much is due to overall government policy (in terms of the development model adopted, the role and strength of the state, and its interest in and capacity to deliver effective welfare and social programmes) rather than health-specific interventions. In addition, there are likely to be major timelags before health spending translates into improved health status and system performance.

Finally, it is important to remember that BIA is not carried out for its own sake. A key question is how it can contribute to the policy debate. A discussion of the possible policy implications of the BIA findings for Andhra Pradesh are shown in the annex as an example.



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## 3 Key findings: benefit incidence studies

A recent review of benefit incidence studies carried out between 1978 and 1995 (Chu *et al.*, 2000) found that public health expenditures were *well targeted* in 21 of the 38 studies and were progressive in all 30 of the studies for which data was available. (Well targeted refers to the fact that the poorest 20 per cent received more public subsidies than the richest 20 per cent. A system is considered progressive if the poorest 20 per cent receive more than the richest 20 per cent *relative to their income or expenditure.*) In terms of the 29 developing countries and countries in transition covered by the review, public health expenditure was generally well targeted in Asia and Latin America but poorly targeted in sub-Saharan Africa and transition countries. All types of health expenditure tended to be well targeted, with the exception of hospital-based outpatient services. In sub-Saharan Africa expenditure at all levels was found to be poorly targeted. The review also found that the performance in relation to targeting could change significantly over time and that a single snapshot is not necessarily helpful.

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## 4 Case studies: benefit incidence studies in India and Bangladesh

### India: the approach and key findings

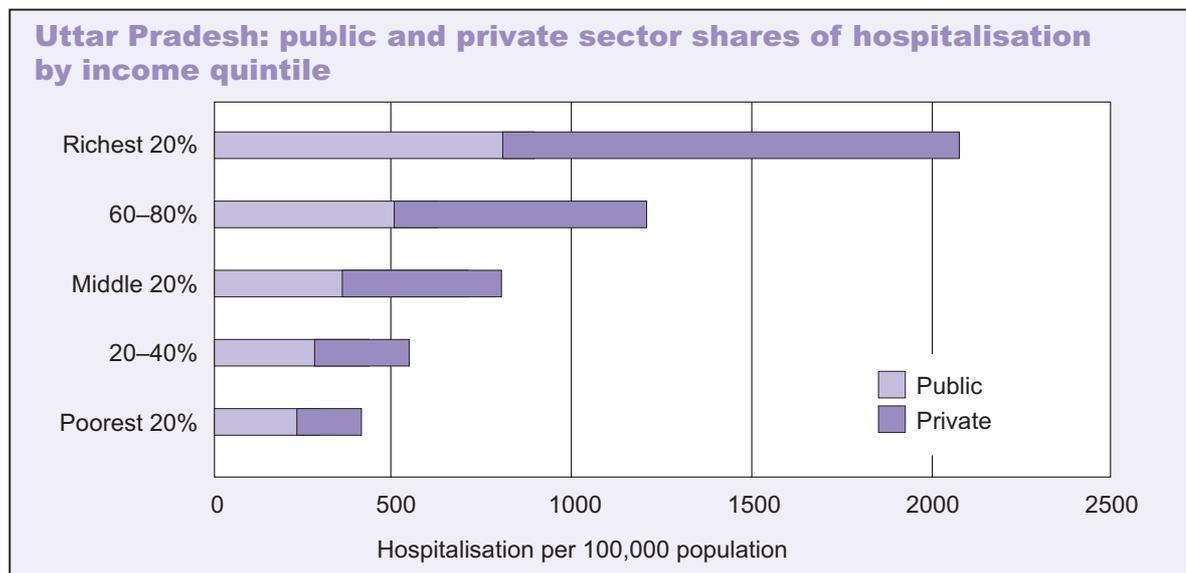
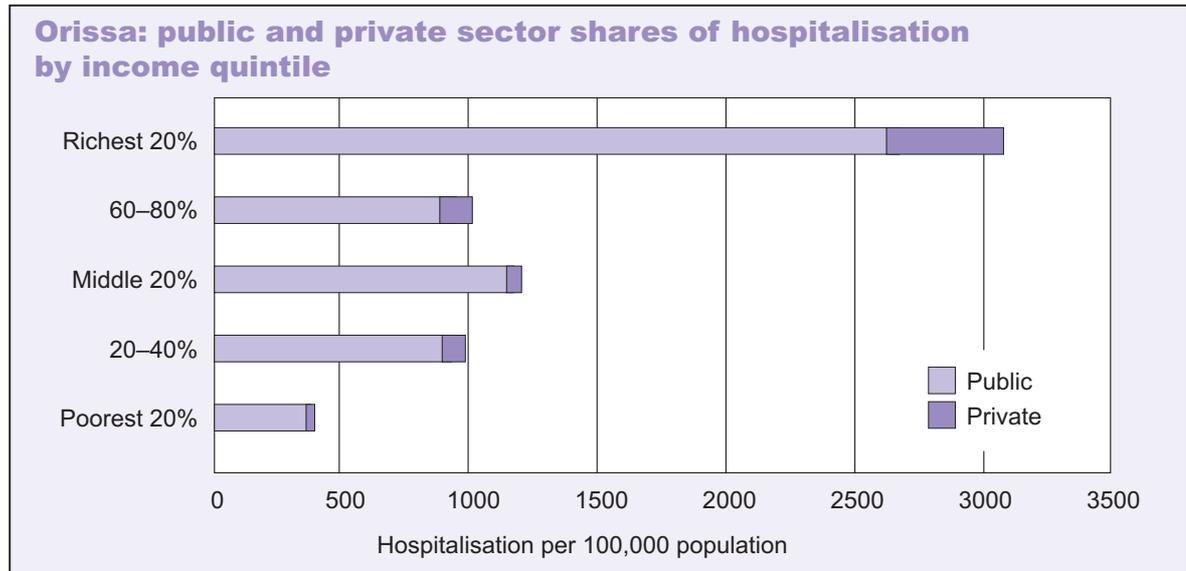
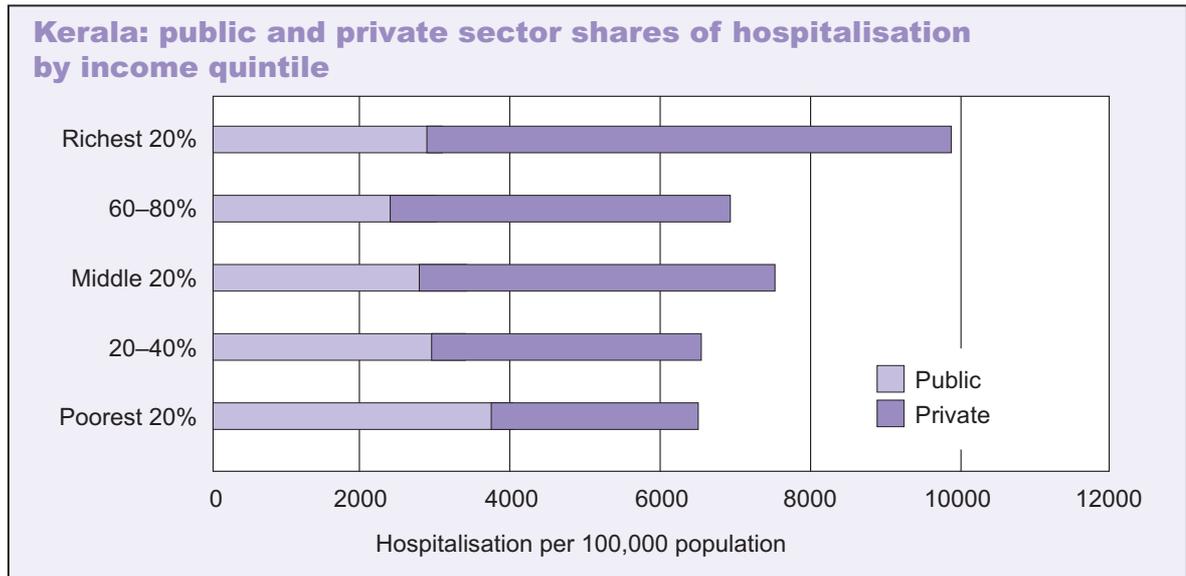
The National Council for Applied Economic Research (NCAER) in India has recently carried out a nationwide BIA which spells out how public subsidies have been distributed using data for 1995–96 (Mahal *et al.*, 2000). In short, the study uses data from a National Sample Survey (NSS) to estimate utilisation by the various target groups identified. Unit costs of the various services are estimated through analysis of budget data compiled from the individual states' budgets.

The study is being externally reviewed. In terms of methodology and the reliability of findings there are naturally some concerns. Reliance on the use of samples is always open to the criticism that the sample was not representative. There are more serious concerns on the costing side, where there are questions as to whether all of the relevant costs have been included<sup>1</sup> and whether the use of a single unit cost across all target groups is valid.<sup>2</sup> A notable feature of the approach adopted is that by relying on NSS data it is possible to look at utilisation in both public and private sectors and shed light on the interaction between the two. This is not the case for the Bangladesh study, which focuses exclusively on the public sector.

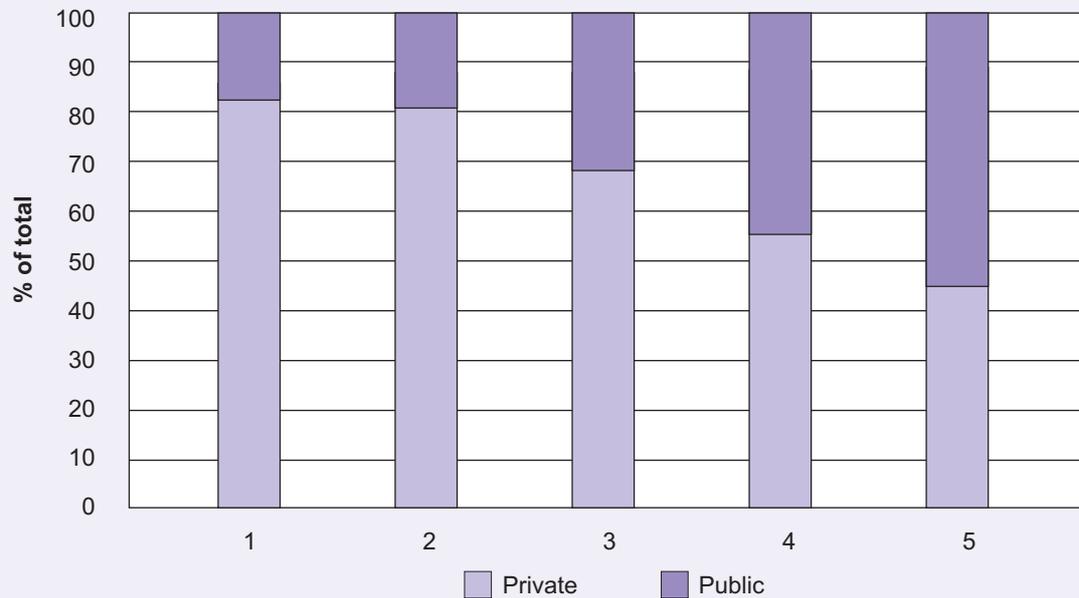
Data is presented for all major states. The figures below show a selection of the findings for three states:

- a good performer: Kerala
- a medium performer: Uttar Pradesh
- a poor performer: Orissa

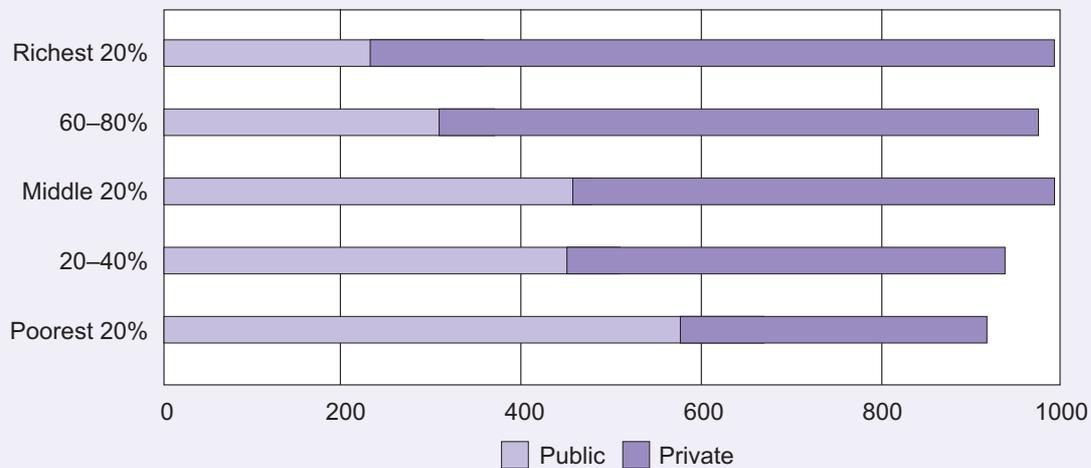
The focus is on hospital services, with additional figures showing the picture for institutional deliveries (which are excluded from hospitalisation tables). Immunisation data is included for Kerala.



### Kerala: percentage of immunisations provided by public and private sector by income quintile



### Kerala: distribution of institutional deliveries in public and private facilities



## India: interpretation of findings and discussion

### ■ Targeting of public subsidies

Kerala appears to have been extremely successful in targeting public subsidies to the poorer groups, with more public subsidies going to the poor than to the better-off – even for hospital services. In Orissa, where the public sector delivers the vast majority of hospital services, the rich appropriate the bulk of the subsidies.

### ■ Equity in access

The figures clearly show that utilisation rates for hospital services in Kerala are high across the board, but that access is also equitable, with the poor using almost as many services as the rich. This relatively equal access occurs despite the fact that the private sector is much more developed in Kerala than in many other states. In Orissa, at the other extreme, utilisation rates are low: the richest 20 per cent in Orissa use less than half as many hospital services as the poorest 20 per cent in Kerala. Utilisation is also extremely skewed towards the better-off. Uttar Pradesh, as the figure shows, falls somewhere in-between these extremes. The data for institutional deliveries for Kerala indicates even greater equity in utilisation, with almost universal coverage and even better targeting of public subsidies.

### ■ Potential of the private sector to deliver public services

The data also shows that it is possible for the private sector to deliver a significant proportion of public goods such as immunisation, for which public provision of the necessary services is assured. In Kerala, over 50 per cent of immunisations for the richest 20 per cent are delivered by the private sector.

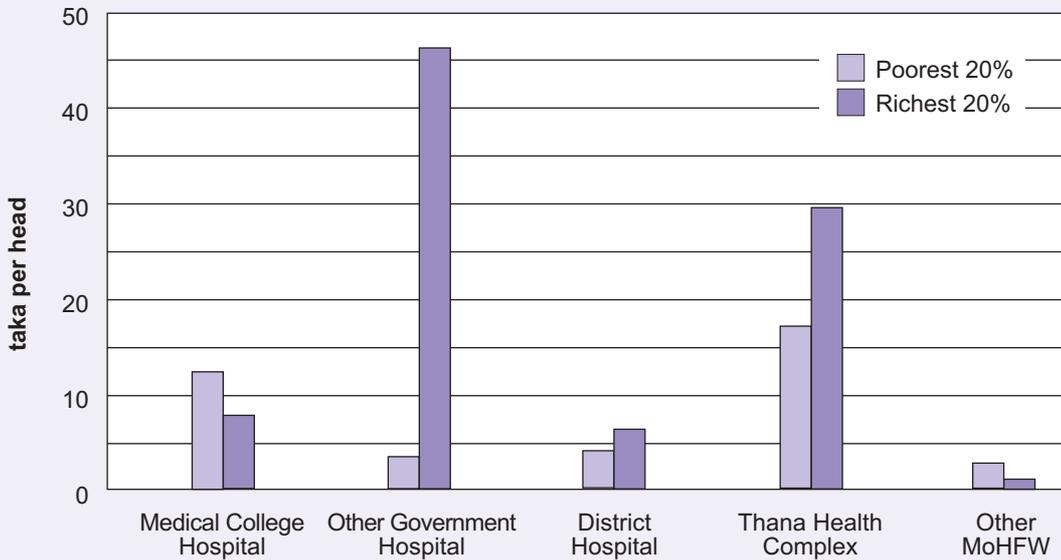
Clearly this data does not necessarily answer all of our questions. It sets out the current situation but does not explain how this situation has come about, what can be done about it and what any targets for improvement should be.

The analysis does not tell us what proportion of public subsidies should go to the different socioeconomic groups. In an ideal world, the rich might not be subsidised at all but would use the private sector or pay full costs in public facilities. In practice, there may be advantages in keeping the middle-income groups within the public fold for at least some services, as such groups are probably far more effective in arguing for improved quality than poorer groups. The question as to how much public subsidy should go to the better-off is down to judgement not science.

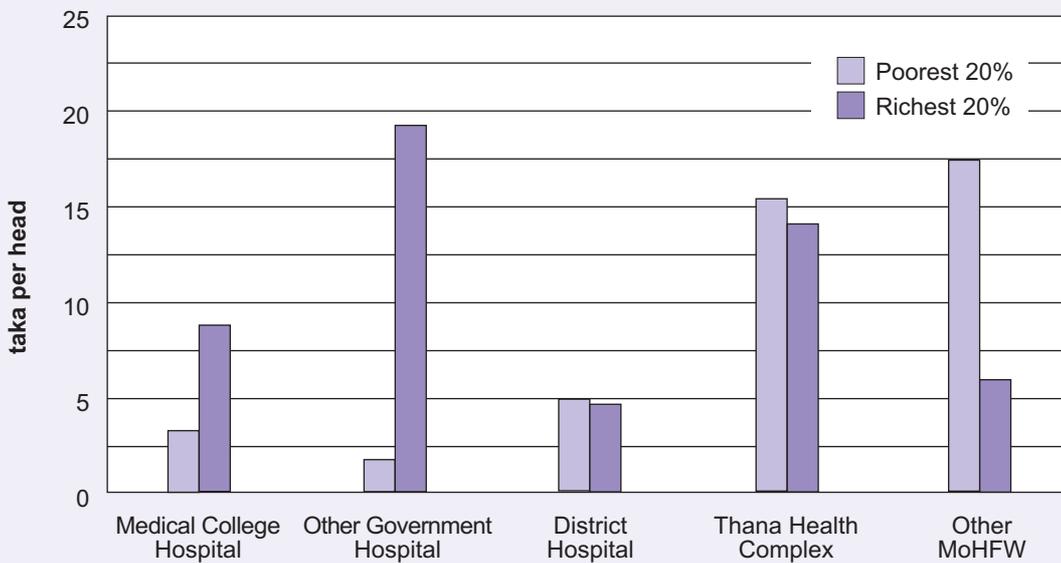
It does seem apparent that Kerala has been able to ensure high levels of utilisation of inpatient and outpatient services at relatively low cost. It has achieved markedly higher utilisation rates, albeit with greater financial inputs, as it does spend more on health in per capita terms than other states. It also appears to have been successful in ensuring a high degree of equity in utilisation across income groups. What the analysis does not tell us conclusively is why or how Kerala has been able to achieve this. How much is due to

sensible health and social policies and how much is due to external factors? Kerala's ability to target public subsidies towards the poorer groups is likely to have been responsible in some measure for the good health indicators that Kerala enjoys. Indeed, whilst Kerala was seen as a major success story in the 1970s and 1980s, there have been concerns that the situation has deteriorated since then. The evidence presented here suggests that at least some of the gains have been sustained. But other factors are also at play. The approach does not explain Kerala's success in achieving high levels of utilisation at low cost. This must be due in part to elements not conducive to policy action, such as geographical factors. Kerala is a small, compact state with a developed transport network, so access tends to be relatively good even in rural areas. The usual disincentive for health staff to work in rural areas and the costs of servicing remote facilities are correspondingly less, probably contributing to Kerala's ease of management and low costs. This clearly casts doubt on the ability of other states to replicate the Kerala experience.

**Subsidy per capita by facility and income group inpatient care in Bangladesh**



**Subsidy per capita by facility and income group outpatient care in Bangladesh**



## Bangladesh: an alternative approach

The following figures show findings from a study carried out by the Health Economics Unit at the Ministry of Health and Female Welfare, Bangladesh (Data International Ltd., 1998).<sup>3</sup> Their point is to illustrate the differences in approach. The focus is only on the public sector, which limits the relevance of the work to discussions about the interaction with the private sector. However, the approach does look at services in a more disaggregated manner than in the India study, and finds significant variations between different types of facility in the primary health Care (PHC) and hospital sectors, which may have significant policy implications (Data International, 1998).

As in the case of India, subsidies are concentrated in the hospital sector rather than at lower levels. The better-off tend to have easier access to public subsidies for inpatient care, even at Thana health complexes. The poor have relatively good access to inpatient care at medical college hospitals, whilst at other government hospitals the subsidy to the richest 20 per cent massively outweighs that to the poorest 20 per cent.

### Notes

- 1 Financing flows in India are extremely fragmented: spending may not be reflected in the budget estimates due to donor and/or Government of India (GoI) expenditure outside the state budget and in-kind flows. The expenditure data analysed only covers that directly related to health services. It focuses largely on two budget lines: for hospitals and dispensaries, and for primary health centres. These account for some 57 per cent of total public health expenditure in 1997–98 in Andhra Pradesh, for example (GoAP Budget Estimates). It does not include many items of health spending such as that related to the oversight functions of the production of such intermediate outputs as doctors through medical education.
- 2 It might be expected that the better-off utilise a greater subsidy per episode than the poor. There is some evidence that the better-off have a longer duration of stay, and this can be allowed for. A more in-depth analysis of whether treatment for the better-off is more intensive – whether they get more tests for the same illness, etc. – is ongoing.



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## 5 Key points

Current approaches to measuring health systems' performance do not adequately reflect the complex processes shaping health sectors and their performance. BIAs and detailed case studies have the potential to help improve our understanding of how health systems perform.

- Assessing who benefits from public subsidies is important because of close links to health sector policy goals relating to equity of access. The distribution of the benefits of social programmes also has a major influence on progress towards achieving the general poverty reduction targets set out in the IDTs.
- Periodic benefit incidence studies could be a useful monitoring indicator of health sector performance (for possible incorporation into Sector Wide Approaches and Poverty Reduction Strategy Papers). Governments can be held accountable for their success in targeting public resources in a way that they cannot be held responsible for improvements in health status.
- There is a lack of consistency in current approaches. Though the approach to BIA needs to reflect the concerns of national policymakers (and not the need for international consistency), it is necessary to learn from best practice. The approach adopted for India highlights the advantages of incorporating data on utilisation in both public and private sectors, as this can help capture interactions between the sectors. The Bangladesh example highlights the advantages of adopting a more disaggregated approach.
- Performance in terms of targeting public subsidies arguably depends more on consumer behaviour, particularly the ability and willingness of the better-off to use the private sector, than attempts by the state to make public services accessible to the poor, such as through exemption mechanisms (though emphasis is usually placed here).
- The results can be threatening. Yet, in showing that most benefits go to the better-off they usually only serve to confirm what we already suspect. Care has to be taken during presentation to ensure that policymakers are not alienated. There is a need for debate on the degree to which public subsidies should be targeted to the poor, since there are advantages to keeping the middle classes in the public system as they are most likely to advocate for change and improvement.
- The findings also throw up some surprises. For example, public subsidies in urban areas in India are far more equitably allocated than in rural areas, which raises

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questions about policies to target resources in rural areas. The difference in performance between the Indian states is also notable, with clear evidence of a north–south divide (the latter performing better). Less surprisingly, they show that public subsidies to hospitals are primarily enjoyed by the better-off.

- Such analyses raise more questions than they answer. Findings need to be interpreted carefully. The key challenges are how to translate the findings into appropriate policies and to identify what information gaps still remain.



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Chu, K., Davoodi, H. and Gupta, S. (2000) 'Income distribution and tax and government social spending policies in developing countries', Working paper Fiscal Affairs Department, Washington DC: International Monetary Fund.

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Mahal, A., Singh, J., Afridi, F., Lamba, V., Gumber, A. and Selvaraju, V. (2000) 'Who benefits from public health spending in India?', Washington DC: Health, Nutrition and Population, Human Development Network, World Bank.

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## Policy implications in Andhra Pradesh

This annex sets out the key findings from the NCAER report for one state, Andhra Pradesh. It identifies a number of possible policy implications and suggests which areas require further work. Finally, it suggests what goals might be realistic in ensuring that public subsidies are better targeted in future.

The Government of Andhra Pradesh mapped out its future strategies in its 'Vision 2002' document. This clearly established the intention to focus public subsidies on ensuring that poor and other disadvantaged groups have access to essential health services.

Whilst this sets the framework for future policy it does raise questions as to:

- what the current situation is and how successful government is in comparison with other states;
- what the options are for improving the targeting of public funds in the future;
- what improvements in targeting are realistic.

## Current situation in Andhra Pradesh: key findings of the BIA

- In overall terms, public expenditure is more equitably allocated in urban areas than in rural areas (Table 1). Subsidies in urban areas are well targeted, with the poorest 20 per cent using over 20 per cent of the subsidies. Subsidies in rural areas are poorly targeted, with the richest 20 per cent using over a third of public subsidies. This is presumably because the private sector is better represented in urban areas. The better-off tend to choose private providers, and this reduces pressure on public services and gives the poor a better chance of using such services. In the rural areas the choice of provider is more restricted, and the better-off are able to use their influence to get superior access to public facilities and subsidies.
- The majority of public subsidies are spent on hospital services (77.7 per cent in rural areas and 93.6 per cent in urban areas – Tables 2a and 2b). Spending on hospitals accounts for the vast majority of public expenditure (especially in urban areas) yet it is the most inequitable of all spending categories.
- In terms of gender, women tend to get relatively a large share of benefits: across the board in urban areas (Table 3b) and focused in the lowest income quintiles in

rural areas (Table 3a). This is somewhat reassuring in view of their greater health needs. Women in higher income quintiles get a relatively low share of benefits in rural areas, which requires explanation.

**Table 1: Distribution of public subsidies in rural and urban areas (percentage)**

	I	II	III	IV	V
Rural areas	15.2	20.0	13.6	17.5	33.8
Urban areas	20.7	22.4	27.5	17.8	11.6

*I = poorest quintile, V = richest quintile*

**Table 2a: Public subsidies in rural areas (Rs million)**

	I	II	III	IV	V	Total	Per cent
Short hospitalisations	136.0	159.6	90.6	202.6	145.9	734.6	44.2
Hospitalisations	170.7	251.6	117.1	238.3	512.7	1,290.3	77.7
PHC and others	45.8	50.2	82.7	28.2	37.1	244.0	14.7
Immunisations	35.2	30.3	25.7	24.1	10.9	126.0	7.6
Total	251.7	332.1	225.4	290.5	560.7	1,660.4	100.0

**Table 2b: Public subsidies in urban areas (Rs million)**

	I	II	III	IV	V	Total	Per cent
Short hospitalisations	106.4	116.1	127.6	90.6	55.3	496.0	60.9
Hospitalisations	149.2	172.5	213.0	136.6	91.6	762.9	93.6
PHC and others	10.4	2.1	3.2	2.6	1.7	19.9	2.4
Immunisations	9.1	7.7	8.3	5.6	1.6	32.3	4.0
Total	168.7	182.2	224.5	144.8	94.9	815.1	100.0

*Note: short hospitalisations are a subset of overall hospitalisations*

**Table 3a: Percentage of public subsidies to females in rural areas**

	I	II	III	IV	V
Short hospitalisations	71.2	50.0	53.6	24.1	67.3
Hospitalisations	73.1	42.8	62.4	28.5	53.9
PHC and others	57.8	65.8	10.1	9.7	13.8
Immunisations	46.5	57.1	45.8	55.9	59.7
Total	66.6	47.6	41.4	29.0	51.4

**Table 3b: Percentage of public subsidies to females in urban areas**

	I	II	III	IV	V
Short hospitalisations	63.8	65.2	47.4	43.2	56.5
Hospitalisations	61.7	71.4	64.4	55.8	66.0
PHC and others	89.0	63.4	-	47.9	-
Immunisations	54.4	54.4	44.6	47.9	26.7
Total	63.0	70.6	62.7	55.4	64.2

### Comparisons with India as a whole and selected states

There is no time series against which to compare this data so it is impossible to say whether the situation is becoming more or less equitable. However, it can be useful to compare the current situation in Andhra Pradesh with that of other states and India as a whole.

It is also difficult to make predictions about how realistic it might be for the government to improve equity and targeting. In this respect, the experience of good performers such as Kerala and Tamil Nadu might be used to define realistic targets for the medium to long term, allowing for the fact that some of the factors responsible for their relative success are not necessarily in place in Andhra Pradesh.

In comparison with other states:

- public expenditure on health is on the low side (Table 4), whilst private out-of-pocket and overall expenditure is above average;
- the role of the public sector in delivering hospital services is among the highest of all states (Figure 5);
- overall utilisation of hospital services in the private sector is just below average (Figure 6);
- a greater proportion of benefits are enjoyed by the lowest quintile at all levels than for India as a whole (Table 7), although Andhra Pradesh performs less well than other states such as Tamil Nadu and Kerala (Table 8);
- a slightly higher proportion of resources are spent on PHC and others, and immunisation (Table 7) than for India as a whole.

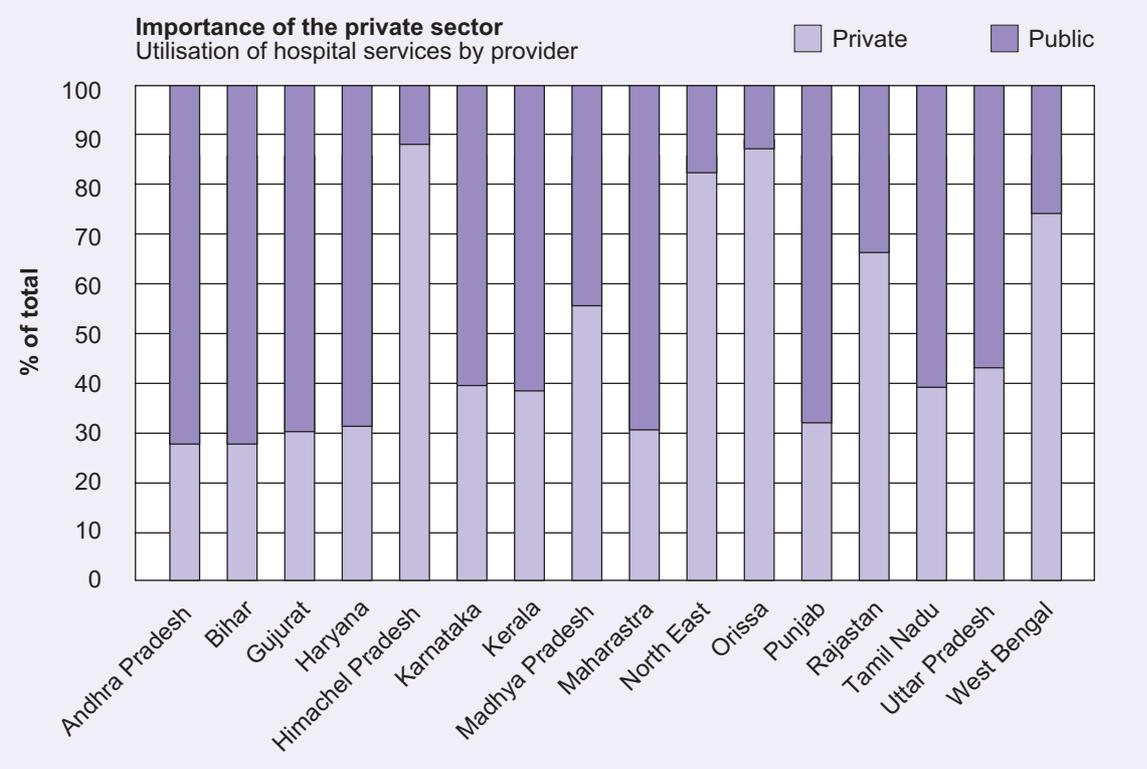
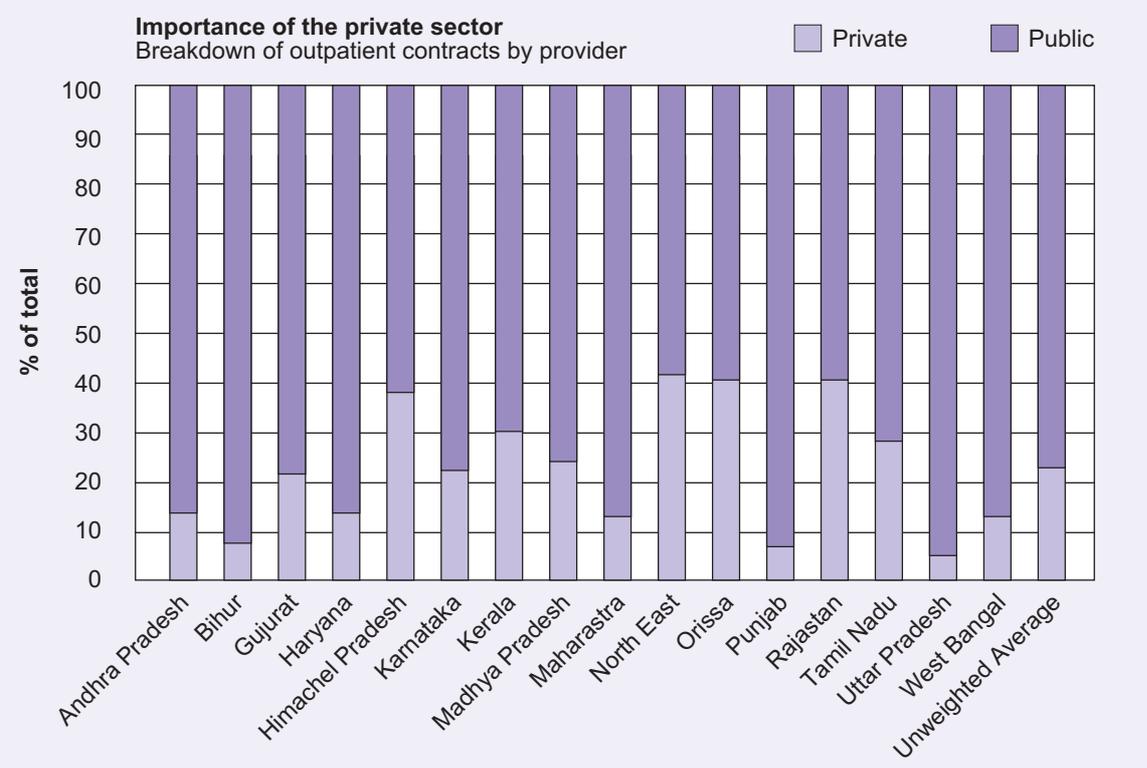
**Table 4: Health spending for major states in India, 1993**

States ranked by column 6	Per capita annual health expenditure			Share of household health expenditure (column 2 as percentage of column 3)	Household health expenditure as percentage of household income	Total health expenditure as percentage of NSDP/NNP
	Govt	Household	Total			
	1	2	3	4	5	6
Jammu and Kashmir*	238	325	563	57.7	NE	10.7
Kerala	111	482	593	81.3	11.9	9.5
Himachal Pradesh	209	370	579	63.9	6.7	8.9
Bihar	51	223	274	81.4	6.1	7.5
Orissa	74	276	350	78.9	8.2	7.4
<b>Andhra Pradesh</b>	<b>66</b>	<b>421</b>	<b>487</b>	<b>86.4</b>	<b>7.8</b>	<b>7.4</b>
Karnataka	93	360	453	79.5	8.8	6.5
Rajasthan	83	196	279	70.3	4.2	5.4
Uttar Pradesh	55	175	230	76.1	4.5	4.9
Gujarat	78	259	337	76.9	4.7	4.4
Madhya Pradesh	63	168	231	72.7	6.9	4.3
Tamil Nadu	100	202	302	66.9	6.5	4.2
West Bengal	73	154	227	67.8	3.4	3.8
Haryana	83	267	350	76.3	4.1	3.4
Punjab	110	282	392	71.9	6.2	3.2
Maharashtra	85	259	344	75.3	5.4	3.2
Assam	66	96	162	59.3	2.4	2.8
<b>All India</b>	<b>84</b>	<b>250</b>	<b>334</b>	<b>74.9</b>	<b>6.0</b>	<b>5.5</b>

\* Estimates for Jammu and Kashmir are based on the previous NCAER survey of 1990.

NSDP – Net State Domestic Product, NNP – Net National Product

Source: Shariff et al., 1999.

**Figure 5: Percentage of hospitalisations in public and private sector****Figure 6: Hospitalisations per 100,000 population**

**Table 7: Distribution of net public subsidies by level of care by quintile (rural and urban – Andhra Pradesh)**

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total subsidy(%)
Short hospitalisations	18.1 (11.1)	17.0 (14.3)	16.6 (20.6)	30.5 (26.4)	17.8 (27.6)	49.6 (57.1)
Hospitalisations	14.8 (8.4)	14.4 (13.0)	15.0 (18.2)	25.5 (26.9)	30.4 (33.5)	83.0 (86.1)
PHC and others	20.5 (20.3)	21.6 (20.7)	33.5 (21.7)	15.2 (20.3)	9.2 (17.0)	10.6 (9.1)
Immunisations	29.3 (23.7)	23.0 (22.2)	21.5 (22.0)	17.9 (19.6)	8.4 (12.5)	6.4 (4.8)
Total	16.3 (10.2)	15.7 (14.1)	17.4 (18.7)	23.0 (26.0)	26.7 (31.0)	100

*All India in brackets*

**Table 8: A comparison with Kerala: Distribution of public subsidies**

Percentage of subsidies	I	II	III	IV	V
Rural Kerala	20.2	21.7	16.1	18.3	23.7
Rural Andhra Pradesh	15.2	20.0	13.6	17.5	33.8
Urban Kerala	32.3	29.9	19.9	18.1	0.2
Urban Andhra Pradesh	20.7	22.4	27.5	17.8	11.6

## Possible policy implications

If government is interested in better targeting of its resources to poor and disadvantaged groups it could consider:

- increasingly focusing its resources in areas where the poor already derive significant benefit;
- improving the targeting of resources in areas where the poor do not currently benefit;
- shifting resources from areas where the poor do not benefit to those where they do;
- enabling measures to improve the targeting of public resources.

Given that the bulk of current subsidies goes to the hospital sector, this is where initial emphasis might be placed.

## Key options

### Shifting resources from hospital to PHC

- Restricting overall allocations to hospitals, e.g. by holding them constant in nominal (real) terms, thus releasing new resources for PHC.

- Greater self-financing of hospital services (e.g. pay beds for the better-off, in the longer term looking at insurance). The fact that the better-off use most of the subsidies invested in hospital services suggests a strong case for this, provided some protection can be afforded to the less well-off.
- Measures to improve the allocative and technical efficiency of resource use by: shifting resources from tertiary to district hospitals and to PHCs; assessing why average length of stay is so high in Andhra Pradesh; allocating resources according to workload and good performance.<sup>3</sup>

### Increasing the share of hospital subsidies going to the poor

- Investigating the potential for better targeting (exemptions, effectiveness of the white card scheme, possibility of self selection).
- Investigating why average length of stay in hospitals is greater for higher income groups.
- Better monitoring of performance of autonomous hospitals in providing services for the poor.
- Learning from the experiences of Kerala and Tamil Nadu, which have been extremely successful in focusing public hospital subsidies on the poor.

### Shifting resources from rural to urban areas?

At a crude level this is what the findings suggest. This, of course, poses a dilemma. The general thinking is usually to focus resources on poorer areas, which are traditionally rural. However, a burgeoning private sector has attracted a large clientele from amongst the better-off in urban areas. In the rural areas there is relatively little private sector activity and the better-off have appropriated most of the public subsidies. This would suggest emphasis be placed on:

- encouraging the private sector to establish a greater presence in rural areas (how?);
- regulating this private sector to ensure at least that it delivers an acceptable quality of care at a reasonable cost and provides some essential services (how?);
- better targeting of public resources in rural areas (how?);
- invest in PHC services in urban areas (a traditionally neglected area in India).

### Resources for women in higher income quintiles in rural areas

The data suggests that, whilst the majority of public benefits in urban areas and in low-income groups in rural areas go to women, they seem to miss out in well-off groups in rural areas. It is not clear whether this is a statistical quirk or whether it reflects a need that perhaps requires further investigation.

### Notes

- 3 A useful performance monitoring system has been developed for the secondary hospital sectors, which measures performance against certain indicators and is supplemented by periodic patient satisfaction surveys.