HEALTH POLICY AND PLANNING; **16**(1): 87–97 © Oxford University Press 2001

Private initiatives and policy options: recent health system experience in India

BRIJESH C PUROHIT
Social Service Area, Administrative Staff College of India, Hyderabad, India

In the recent past the impact of structural adjustment in the Indian health care sector has been felt in the reduction in central grants to States for public health and disease control programmes. This falling share of central grants has had a more pronounced impact on the poorer states, which have found it more difficult to raise local resources to compensate for this loss of revenue. With the continued pace of reforms, the likelihood of increasing State expenditure on the health care sector is limited in the future. As a result, a number of notable trends are appearing in the Indian health care sector. These include an increasing investment by non-resident Indians (NRIs) in the hospital industry, leading to a spurt in corporatization in the States of their original domicile and an increasing participation by multinational companies in diagnostics aiming to capture the potential of the Indian health insurance market. The policy responses to these private initiatives are reflected in measures comprising strategies to attract private sector participation and management inputs into primary health care centres (PHCs), privatization or semi-privatization of public health facilities such as non-clinical services in public hospitals, innovating ways to finance public health facilities through non-budgetary measures, and tax incentives by the State governments to encourage private sector investment in the health sector. Bearing in mind the vital importance of such market forces and policy responses in shaping the future health care scenario in India, this paper examines in detail both of these aspects and their implications for the Indian health care sector. The analysis indicates that despite the promising newly emerging atmosphere, there are limits to market forces; appropriate refinement in the role of government should be attempted to avoid undesirable consequences of rising costs, increasing inequity and consumer exploitation. This may require opening the health insurance market to multinational companies, the proper channelling of tax incentives to set up medical institutions in backward areas, and reinforcing appropriate regulatory mechanisms.

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

Introduction

Like many other developing countries, India chose to adopt the path of structural adjustment in the early 1990s.[1] The process implied a liberalization of the Indian economy and simultaneously aimed at reducing the budgetary deficit. Consequently, the governmental expenditure on the social sectors had to be curtailed.[2] The impact of these measures is also being felt in the health care sector.

Although there are three tiers of government, namely Central, States and local, which contribute to overall public sector spending on health care, the primary responsibility for health care in the Indian Constitution rests with the States. In general, a major chunk of public expenditure (almost 90%) on the health care sector comes through the States' budget. In this regard, however, there is a certain degree of financial dependence of States on the Central government. First, it is through Central funding that States run the family planning programmes and centrally sponsored schemes like national disease control programmes, including leprosy, malaria, tuberculosis, immunization, nutrition schemes and the components of primary health care, rural water supply and sanitation which fall under the minimum needs programme of the Centre. The funding from Central government to the States comes either as cent percent grants or partly through matching grants – in the latter, the States have to contribute through a matching contribution from their budgets. Secondly, the Central government finances medical research and education in the Centrally funded institutions.

In the period prior to liberalization, between 1974–82, grants to the States from Central government for the health sector comprised 19.9% of the States' health expenditure. However, following liberalization, this component of central grants fell to 5.8% (in 1982–89) and further to 3.3% (in 1992–93).[3–5] This decline is most noticeable in the case of specific-purpose central grants for public health and disease control programmes (Table 1). The central component for the former of these (public health) dropped from 27.92% (in 1984–85) to 17.7% (in 1992–93). The latter in the same duration declined from 41.47 to 18.50%. The other component of health expenditure, family welfare, also faced a decline of central grants, from 99 to 88.59% of the States' health expenditure.

This falling share of central grants had a more pronounced impact on the poorer states,[i] which found it more difficult to raise local resources. The likelihood of increasing state

Table 1. Percentage of health expenditure by States[a] met from Central grants in India

Year	Medical and public health[b]	Public health	Prevention and control of diseases	Family welfare
1984–85	6.73	27.92	41.47	99.00
1990–91	3.21	15.24	24.43	81.72
1991–92	3.50	15.72	25.21	72.31
1992–93	3.70	17.17	18.50	88.59

[a] These percentages are of the health expenditures incurred by the Indian States. The absolute values of the expenditures incurred on these items by the States are presented in Table A in the Annex.
[b] Includes both revenue and capital expenditures for this item. For other items figures relate to revenue expenditure only.
Source: Refs 3 and 5.

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

expenditure on health care sector is further limited in future with the continued pace of reforms. As a result a number of notable trends are appearing in the private health care sector in India. These private initiatives include an increasing investment by non-resident Indians (NRIs) in the hospital industry, a spurt in corporatization in the States of their original domicile and increasing participation by multinationals keen to explore the health insurance market in India. Some of these developments in policy and market forces have their initiation in the recent past or have been reinforced in the wake of structural adjustment. It is probably with the aim of mobilizing resources based on the recent private initiatives that some States have been trying to shift responsibility on to the private sector through various policy measures. These include, for instance, strategies to attract private sector participation and management input into primary health care centres (PHCs), privatization or semi-privatization of public health facilities like non-clinical facilities in public hospitals, innovating ways to finance public health facilities through non-budgetary measures, and tax incentives by the State governments to encourage private sector investment in the health sector.

Bearing in mind, however, the vital importance of such initiatives in the private sector and the policy responses in shaping the future health care scenario in India, the objective of this paper is to examine in detail both of these aspects and their implications for the Indian health care sector. This study is based on published information available from governmental and other agencies. The former of these include budgetary documents, publications of the Ministry of Health, and studies carried out for the governmental agencies. The latter comprise various publications of independent agencies working in the area of health. The paper is divided into four sections. The following section elaborates upon recent developments in market forces, which have a direct bearing on the health care sector in the country. The next section dwells on the policy measures, recently initiated or reinforced, by various State governments. The final section brings forth the policy options and welfare implications emerging from the analysis.

Market forces

One of the most significant trends emerging in the wake of liberalization is the new vigour of the entry of corporate hospitals and multinationals in the health care scenario. The reason for this new tempo is the potential that India offers to NRIs and multinationals. With the current ratio of population to all types of beds being 1300: 1, it has been estimated that there is a huge demand–supply gap which may require nearly 3.6 million beds to overcome it.[6,ii] Taking into account the requirements of primary and secondary health care, the shortfall is estimated to be around 2.9 million beds. In tertiary health care, the gap may be somewhere around 20% of the above total, which amounts to some 0.58 million. With investment costs per bed per year (including land, building, equipment, support system and medical consumables) ranging from Rs 0.7 million to Rs 3.5 million depending upon the nature of specialty, the resource requirements are enormous. Further, from a survey conducted by the Confederation of Private Sector Initiatives in Health Care, it is estimated that against a requirement of 60 000 super-specialty beds each year, only 3000 multi-specialty beds are being planned in India, which may cost around Rs 7200 million over the next 3 years.

Growing NRI investment in the hospital industry

Realizing the need, the potential for profit and from a desire to develop the States of their original domicile, many NRIs from the USA and UK have taken interest in the development of health care diagnostics or super-specialty hospitals in their hometowns. Between August 1991 and August 1997, the Foreign Investment Promotion Board (FIPB) approved foreign direct investment (FDI) proposals worth US$100 million (about Rs 3600 million) in the Indian health care sector.[7] The major chunk of this FDI (Rs 1160 million) goes to Delhi,[iii] helping in the development of a super-specialty hospital and diagnostic centres. Other places in the country to benefit from this NRI investment include Guntur in Andhra Pradesh, Bhuwaneshwar in Orissa (Rs 30 million), Calcutta in West Bengal (Rs 80 million) and Bangalore in Karnataka (Rs 0.6 million).[iv] These investments in States other than Delhi are mostly focused on diagnostic centres and bring with them high-tech care, advanced medical technology and trained Indian medical manpower. This is partly halting and reversing the brain-drain of medical personnel.

Corporatization of the hospital industry

Health care is thus emerging as a blue-chip industry and in recent years has attracted the investment of both domestic

and foreign companies. Unlike the earlier image of the private sector, which mainly focused on nursing homes and polyclinics, the new market orientation is towards super-specialty care.[8] In this regard, although the pioneering efforts were made way back in 1983 by a group known as Apollo,[v] a number of other companies have now entered the market. Notable among the latter include successful domestic and foreign companies like CDR, Wockhardt, Medinova, Duncan, Ispat, Escorts, Mediciti, Kamineni, Parkway, Jardine, Nicholas and Sedgwick.[9,10] The entry of so many such companies has added towards corporatization of the health-care industry with a focus on high profit-margin, super-specialty and diagnostic care. Mostly these companies have expanded their network in India's major metropolitan towns.

Increasing participation by multinationals

Given the rising cost of health care in the last 5 years,[vi] the foreign companies are aiming to capture the potential of the health insurance market for nearly 135 million people in the upper-middle income segment of the population who can afford private health care. Against an estimated potential health insurance market of between Rs 6500–275 000 million, the present annual health insurance premium market by the General Insurance Corporation and its subsidiaries is merely Rs 1000 million, covering just 1.6 million people. In view of the possible opening of the market to multinationals, many foreign companies have already taken preliminary steps, such as setting up their representative offices or entering into ties with Indian companies.[vii] These companies aim to devise health insurance schemes suited to the Indian situation, to improve coverage by incorporating payments for general physicians (GP), medical tests and specialist charges, and containing costs through appropriate controlling systems.

Besides health insurance, the high-tech, medical, electronic equipment industry has been the other area to attract investment by multinationals following liberalization. This is due to the high-tech nature of modern diagnostics, which is based largely on foreign technology having a high obsolescence rate of around 5 years and thus high replacement needs. In general, a reduction on import duties on individual components, and high rates of import duties (up to 31–37%) on high-tech finished products (like CT scanners), have together encouraged multinationals to assemble the imported components in India. Consequently, of total imports of medical equipment (Rs 4500 million), more than half (Rs 2800 million) comprise locally assembled medical electronics (like X-ray, ultrasound, CT scanners, patient monitoring equipment, etc.), with the remainder constituting other electronic medical products (like sterilizers, endoscope accessories etc.).

Policy measures

In the last 1 or 2 years a number of State governments have become increasingly aware of the possibility of introducing policy measures that could enhance resource availability to the health care sector either through economic or institutional reforms. These include policy initiatives to attract private sector participation and management inputs into running PHCs, the privatization or semi-privatization of public sector health facilities, innovative non-tax measures to finance public health facilities, and tax incentive measures to attract private sector investment in health care. Some of the State governments have even initiated moves to reorganize their health directorates into public sector undertakings.[viii] More often, however, this has been done with the assistance and insistence of the World Bank. In this section we do not intend to go into this aspect of reorganization but rather focus on the other above-mentioned measures.

Measures to attract private sector inputs in PHCs and privatization

Owing to scarcity of resources, the existing public health system has been unable to provide care to all. At present as many as 135 million Indians do not have access to health services.[15] Despite the Bhore Committee's recommendations in 1946 of the provision of one health centre for every 20 000 people, the country currently has one PHC per 31 000 population.[15,16] Even the existing public health facilities run with abysmally low resources; presently, an average Indian PHC has as its budget only Rs 1 per capita for drugs. Thus, apparently prompted by the desire to increase access for more people, some of the State governments have recently favoured an increasing participation of the private sector in running the existing public health facilities.[17,18]

In this regard two distinct strategies with differing implications have been adopted. One strategy has been to attract direct private investment purely on a philanthropic basis while maintaining the bureaucratic management of the existing health care facility. Expenditure by the private companies falls under charitable purposes and can be claimed for exemption from taxation; beyond this, there is no benefit to the private parties. This strategy has been adopted in Tamil Nadu where the State government has called for private sector participation by inviting private investment in public health-care infrastructure and improvement. To expedite this process a special division has been created in the State's department of health and family welfare for the promotion of private sector participation in public health. The emphasis has been laid on the adoption by the private sector of PHCs, district and taluk hospitals and other government-run medical facilities to improve the facilities provided. The State has sought private participation in the form of construction work, maintenance and provision of equipment, with the government providing the staff, medicines and management. Tamil Nadu has 1420 PHCs, many of which are not housed in their own buildings, and there is inadequate maintenance even at the level of taluk and district hospitals.[ix] The privatization strategy will therefore help in raising resources for maintenance purposes. As many as 100 PHCs in the State will be maintained through various private companies and industrial houses under the PHC participation scheme.[x]

Thus the efforts of Tamil Nadu State are geared towards pooling public and private resources for social purposes, and impose more social obligations on industry. The success of such pilot projects depends upon the continual good profitability of companies participating in the scheme and good

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

mixing of two different work cultures, namely, public and private.

Another strategy has been to increase private sector participation by handing over the management of public sector facilities to a private party working on a not-for-profit basis, with core funding coming from the government. Such a move has been made by the State of Maharashtra. The State government appointed a committee in July 1997 whose recommendations were available in October the same year. The committee suggested some 30 guidelines for considering the transfer of a PHC to those registered private NGOs that are capable of providing such services in remote and hilly areas. The emphasis of these guidelines is on the capabilities of the private organizations and the functions to be performed by such parties after the takeover, and the amount and method of grants to be received by these organizations. According to the committee, it should be ascertained that the concerned NGO has the requisite manpower, expertise in providing basic health services in remote and hilly areas, vehicles and capacity to provide specialized extension services and medical aid in cases where patients need to be referred. Generally these private agencies will have the right to retain the existing staff or to effect changes in the workforce while adhering to laid-down government norms. In either case, the agency will receive wage expenses for its employees from the government. The agency taking over the PHCs shall also be responsible for providing residential quarters for its staff, training, miscellaneous repairs and surrounding sanitation.

As per the committee's recommendation, a grant of Rs 12 000 per PHC will be provided to these agencies. The grant for construction of the health-post building and residential quarters for staff will be a reimbursement, based on a certificate from the public works department of Zilla Parishads. In case of implementation of various health schemes and programmes, the agency shall be eligible to receive grants, medicines and other equipment. However, expenses incurred on programme implementation and on administration will be borne initially by the agency and will be reimbursed based on actuals after every 3 months. The committee has suggested that the private agencies shall only be allowed to charge medical fees to patients as per government rules. The money collected from such fees shall be deposited in a separate account that can be utilized by the agency for repairs and upgrading of its services.

Thus, the guidelines by the Maharashtra Committee take care of crucial issues surrounding private sector management of public sector health facilities. The fixing of user fees at existing Government levels ensures that the poor do not suffer and the resources are used to improve provision of services for all. This kind of development of transparent policies and legislation can achieve private sector involvement in health care delivery in a socially desirable manner.[xi]

Besides the above strategies for increasing private sector participation, in some States such as Rajasthan, Punjab and Himachal Pradesh, policy initiatives have been made to contract out some specific services in public hospitals.[19] For instance, in Rajasthan both the laundry and kitchen services have been contracted out in all its teaching hospitals. In Punjab the cleanliness services have been contracted out in Jalandhar. Involvement of the private sector in the health care education system has been tried in Himachal Pradesh; recently the State government, in collaboration with a leading private group of hospitals, formed a trust to start a medical college. Likewise, some good private institutions are being allowed to start nursing courses. The State has identified some 24 NGOs for a Rural Health Volunteer Scheme. Under the scheme the NGOs will train women above 30 years to act as a link between the government functionaries at the village level and the NGOs.[xii]

The above-mentioned strategies to increase private sector participation in public health facilities have a common objective: to make the private sector a partner to shoulder social responsibility with the government. However, the success of any of the approaches will depend upon considerations in their implementation. In the first strategy, attracting private investment on a philanthropic basis, the main considerations would be continued profitability of the company, its geographical location, screening of companies based on their past record of social responsibility, the extent of financial responsibility shouldered by the company and applicability of the tax deduction clause for the company expenditure. The incentive for the company would be the tax deduction from its profit taxation. However, this kind of support would depend upon its future profitability. With fluctuations in trading activities, the market situation may sometimes lead a company to retrench its funds from the social responsibility. In anticipation of this, there should be an alternative arrangement by which the government can invite further, alternative private sector participation without causing undue delay in providing the requisite care in the local area.

In the case of the second strategy, involving private sector management in public health facilities, the crucial considerations would be procedures for the effective delegation of powers within the existing bureaucratic framework and mechanisms of coordination between lower level (PHC) and upper level (district) authorities. The performance following the private sector adoption of a PHC would still depend crucially upon the cooperation of bureaucracy in various ways. In the absence of clear autonomy in hiring personnel, wage fixation and rate fixation, while taking into account the affordability of poorer people in the area, the chances for success of such collaboration between public and private sectors may be slim. This kind of autonomy may require modification of rules and procedures, which may be a time-consuming process and political interference may slow it down further.

Innovative non-tax financing

Some Indian States have initiated some innovative financing measures to mobilize private resources for the public health-care delivery system. For instance, Kerala and Rajasthan have set up committees, known as the hospital development committee (Kerala) or medicare relief society (Rajasthan). These are entrusted with all the funds, which include user charges, visiting fees, outpatient fees etc. These committees

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

have their own bank account and can decide upon the allocation of funds.[xiii] Another innovative method initiated by Himachal Pradesh is a scheme called 'Vikas Me Jan Sahyog' (Peoples' participation in development). This scheme envisages 20% of funds being contributed by the people and the remaining 80% coming from the State government. The scheme covers the construction of hospitals, sub-centres and ayurvedic hospitals in a specific area. Likewise, in Kerala an innovative measure of raising resources for cancer control was initiated by involving the community in a unique way. For instance, it was announced by the State that 25% of the total collections from Indira Vikas Patra[xiv] would be earmarked for early detection and prevention of cancer. This resulted in an enormous positive response from the public, and instead of a planned collection of Rs 100–120 million under the scheme, Rs 760 million was collected. In fact, 25% of this collection, earmarked for a cancer control and early detection programme, was equivalent to nearly 10 years of the sanctioned budget.

Tax incentive measures

A number of tax concessions have been extended to the hospital industry in recent years. These include both central and State level measures. At the State level, these concessions are available in the allotment of land and investment allowances for medical equipment. The Rajasthan Government, for instance, has adopted incentive measures such as the allotment of land for hospitals at concessional prices and subsidy for investment in medical equipment.[20] In order to extend these facilities, the private enterprises have been classified into different categories[xv] which could take advantage of a reduction of 25–50% on the market price of agricultural land in rural areas and the residential land price in urban areas, up to a certain land ceiling. However, if the land allotted for medical institutional purposes is not put to use within 2 years from the date of allotment, it may be taken back by the government. Likewise, if the medical institutions were set up before 31 March 1999, the eligible health care institutions are exempted from local levy and State sales tax on medical equipment, plants and machinery imported from abroad or outside the State or purchased within the State.

Many of these incentives, as well as financial help from banks, are available to private hospitals in other States, including Andhra Pradesh and New Delhi. In return for these concessions, however, these corporate hospitals and diagnostic centres are required to render free outpatient and in-patient services, at least to 40% of their patients who may be identified as poor and either referred by government hospitals or otherwise. The idea behind this is to cross-subsidize the poor partly through the government subsidy and partly through the higher rates charged to high-income patients by these hospitals. In practice, however, the hospitals do not follow this agreement. Thus, some of the branches of the Indian Medical Council (e.g. Vijayawada in Andhra Pradesh) have demanded that the government should make it mandatory for these hospitals to display a board on their premises informing patients about the free services clause.[21] Likewise, the Council has suggested that government hospitals should refer patients identified as poor for treatment to these hospitals.

However, there remains a problem of coordination on this aspect between the private hospitals and the concerned State governments. For instance, in Delhi, the Apollo Hospital, which was recently constructed on concessional land by the government (the latter also being a partner holding a 26% share), was required to build a free outpatient ward, provide 200 free beds and free diagnostic and operation theatre facilities and free diets to poor patients. Despite this all being carried out by the hospital, there was some confusion; government administration also insisted on free medicine and consumables for poor patients, despite the absence of such a clause in the contract.[22] Likewise, under the contract it was agreed that complicated heart and brain surgery would be performed free of charge for the poor by 'Super Specialists' at the hospital. But, due to further confusion, the government has been insisting on admitting and treating all road accident victims for free at the hospital, again a condition not mentioned in the clause. As a consequence the excellent facilities of the outpatient and in-patient wards, operation theatres and other diagnostics have remained unutilized and the dispute remains unresolved.[23]

At the central level, these hospitals have the advantage of the concessional duty for imports of medical equipment. At present, the import duties have been reduced to an average level of 15% for medical equipment and there is no duty on life-saving equipment.[24] At the aggregate level, in value terms these imports contribute 50% of the total requirements of medical equipment in the country. This kind of import liberalization for health care equipment is accelerating the growth in the domestic production of medical supplies,[xvi] but it is also being spurred by the affluent and consumer-oriented middle-income population, which is demanding quality health care using hi-tech equipment.[xvii]

Policy options and welfare implications

Many of the merits and problems associated with recent policy measures and market forces concerning developing countries generally, seem to be equally relevant for the Indian health care sector. The main thrust of policy in the post-liberalization period has been to encourage market forces. However, there are limits to this approach, unless appropriate refinement in the role of government is undertaken. In the last few years, many of the recent reforms both in developed and developing countries have been geared towards privatization or increasing private sector participation in public health care.[26] With increasing private sector participation it is presumed that managed markets, especially in the hospital sector, will increase supply-side efficiency by increasing competition among providers and there will be increased transparency in trading or hospital business.[27] Also, efficient managed markets in welfare services like health presuppose: (1) competition between suppliers; (2) definable outputs for which consumer valuation could be made; and (3) lower transaction costs compared to an existing set of costs.[28] In some recent reforms some of these conditions are not satisfied, one consequence of which has been a rise in costs.[xviii] Nonetheless, it has been emphasized that the private sector can be a more efficient producer of secondary and tertiary level health care, and therefore the government budget can

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

be diverted to primary health care or to a minimum package of care.[27,31,32] In general, the experience of other developing countries indicates that the consumer (i.e. the patient) will be exploited if there is sole reliance on the private for-profit sector, since it will serve mainly the better-off strata of society in the urban areas and thus exacerbate the problem of equity.[33–45]

Thus, even though the newly evolving atmosphere initially seems to be promising, there remain numerous concerns. First and foremost, the measures aimed at privatization of public sector health facilities should not be construed as a pretext to shun the essential responsibility of government to provide basic health facilities. Without refining the role of government, a greater reliance on market forces may be counterproductive to health status.[46]

One of the adverse implications of structural adjustment can be seen through a comparison of two official estimates for 1986–87 and 1995–96 on utilization of health care facilities published by the National Sample Survey Organisation (NSSO) of India.[11,12] The NSSO estimates indicate that there was a 4% increase in untreated ailing persons in the lowest expenditure fractile group in both rural and urban areas, increasing in 1995–96 to 26 and 19% respectively for rural and urban areas. The distribution of these untreated ailments indicates that in rural areas there was a rise in inaccessibility to treatments of 9% due to financial reasons and 6% due to lack of facilities. In urban areas, the figures are 11 and 1%, respectively. Further, the percentage distribution of non-hospitalized treatment indicates that there has been a declining reliance on public providers. As per NSSO estimates between 1986–87 and 1995–96, the utilization of government sources of treatment (including public hospitals, PHC/CHC, public dispensaries, ESI doctors, etc.) declined from 26 to 19% in rural India and from 28 to 20% in urban India. For hospitalized treatment, the decline in utilization of government sources was from 59.7 to 43.8% in rural areas and from 60.3 to 43% in urban areas.

The welfare implications of recent trends in the post-liberalization period depend to a great extent upon the deft regulatory mechanisms to encourage market forces and simultaneously avoid adverse outcomes like rising costs, increasing inequity and consumer exploitation. One of the adverse implications of the above-mentioned trends of increasing corporatization and supplier-induced hi-tech care has been the rising cost of health care,[vi] from which it is essential to protect the poor. This may further necessitate the development of a proper mix of public and private health insurance suitable for providing adequate coverage to all. Given the present status of miniscule health insurance coverage through the government-owned General Insurance Corporation and its subsidiaries, an important step will be to open up the insurance market to the multinationals. Already, with the expectation of exploring the potential market in India, some of the multinationals have begun to tie up with domestic companies.[vii] An early liberalization in this direction will be an important step in providing a boost to the newly emerging markets and consumers in the health care sector. In this regard, legislation approving the formation of an Insurance Regulatory and Development Authority (IRDA) has been passed recently by the Indian Parliament.[xix] The IRDA will be responsible for inviting, processing and approving applications from potential insurance companies and issuing licenses for their legal operation in India. The application process should start by May–June 2000 and companies will start receiving registration from October–December 2000. The IRDA bill and its follow up may help the insurance business and health insurance cover to grow substantially.

It should be stressed, however, that health insurance as envisaged by the multinationals is not a panacea to all the problems of resource constraints, as it is initially likely to cater to people in the organized sector only. The vast majority of the Indian population continues to remain in rural and underserved areas, and a major chunk of the population makes its livelihood in the unorganized sector. It is this segment that will continue to need public sector health facilities in the same way for quite some time to come. Therefore, the liberalized atmosphere of mushrooming corporate hospitals may not be a workable substitute for adequate budgetary spending on the health care sector. The apprehension is that without a more suitable policy to enhance government support to existing public health facilities, it may lead to further increasing inequity between the levels of health care facilities available to the well-off and the poorer strata of the society.

In this regard, an interesting option proposed recently suggests that a rural hospitalization insurance scheme for people below the poverty line could be initiated as a part of an anti-poverty programme at a cost of Rs 9000 million, presuming a low premium of Rs 30 per head for the estimated 300 million poor in the country.[47] Based on National Sample Survey data on morbidity and utilization of medical services, the average cost of hospitalization per episode per year for 1996 is approximately Rs 500. It is also estimated that there are nearly 300 million people below the poverty line; at a particular point in time only 6% of this population will require hospitalization and therefore risk pooling will take place. Further, the insured persons under this scheme would use free wards in public hospitals and would not incur any cost on room rent. The insurance would cover the cost of medicines, tests and a modest fee for consultation. The scheme would provide insurance protection of Rs 5000 per family per annum for hospitalization at a modest cost of Rs 30 per person. The total cost would come to Rs 9000 million for hospitalization coverage for 300 million persons.

This scheme should be taken up as part of the anti-poverty programme and thus resources should come from unspent savings under the programme or by a reallocation of government expenditure. The scheme would be run by health insurance units of the four subsidiaries of the General Insurance Corporation which should be converted into four separate health insurance corporations functioning as not-for-profit organizations. These corporations should have complete freedom to work out their own premia structure and should be permitted to compete among themselves. These corporations should be governed by the proposed Insurance Regulatory Authority. Under the scheme, it would be the responsibility of the Panchayts (the rural tier of the local self-government) to identify the poor and take out insurance for them. To prevent misuse of the scheme, hospitalization would have to be

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

referred by the physician in charge of the PHC. The health insurance corporation should directly settle the bills with the provider hospital. To control cost escalation, these corporations would have to periodically conduct cost surveys and lay down the structure of reimbursements for various treatments and procedures. The proposed insurance cover would provide more effective protection up to Rs 5000 relative to a direct payment of Rs 30 to a person or Rs 150 to a family of five persons. Despite the merit of the idea, so far there has been no indication about its implementation.

With a view to mobilize more resources for public sector health institutions, there are merits in the recent move to attract private sector participation in public health facilities. The strategy of attracting private investment has the underlying objective of not only increasing the availability of resources through pooling of public and private funds for social purposes, but also shifting the responsibility of a hitherto state welfare activity onto a profit-making enterprise. The success of such a scheme would, however, depend upon the continued profitability of private enterprise. This would also require an adjustment of bureaucracy and private parties on various details pertaining to the scale and level of activities. Cooperation in procedures of approvals and reimbursements from different government functionaries will greatly determine the successful outcome of such a scheme. The success of the move to attract private sector participation in maintaining PHCs in the Indian States will only be observed after time has passed. If there is a positive outcome, other states may like to follow the suit. Meanwhile, the current situation of resource scarcity aggravated by budgetary cuts from the central government may continue to leave the poor without proper public health facilities.

Private sector participation through financial or manpower inputs has been more successful through the initiatives to contract out non-clinical services and these hold more promise for the future for other states. In Rajasthan, the contracting out of laundry and kitchen services helped the teaching hospitals to reduce costs[xx] and avoided the problem of labour unionization demanding job permanency, which earlier made it very difficult even to retrench inefficient or redundant labour.

It is likely that with more proliferation of private health institutions in urban areas, there will be further incentives and opportunities for doctors to avoid government services in rural areas. The real solution to this problem may lie in bridging the gap in the various infrastructural aspects between rural and urban areas. So far in the post-liberalization era, the positive outcomes in terms of increasing per capita income owing to enhanced business and trading activities have a strong urban bias. This may further the prevalent rural–urban disparity in the country and will likely affect the government's attempts to improve the availability of doctors in remote rural areas. In this regard, the involvement of NGOs could be a more successful strategy. In view of the significant support that NGOs have been able to provide for dysfunctional or non-existent government health and medical manpower facilities in the rural areas of various states, policy initiatives should be focused on the long-term sustainability of these NGOs.[48–51]

Another step to increase health facilities in rural areas may be to encourage private enterprise by means of concessions like tax holidays for investment in the health sector in backward areas. Simultaneously, to derive more advantage from liberalization for the health sector, efforts should be directed at providing fiscal incentives to encourage indigenous manufacturers of medical equipment.[xxi] This will help in saving precious foreign exchange and in the development of the medical equipment industry. The latter, in due course, will help in providing better quality care at lower cost. The current problems in providing tax subsidies to corporate hospitals in urban areas, like confusion over free treatments in lieu of tax subsidy, need to be overcome in the preparation and implementation of contracts between the corporate entrepreneur and respective State governments. Such problems indeed defeat the very objective of helping the poor. Currently the hospitals themselves decide about the criteria of being poor. This is done through their public relations department. Generally this involves an element of arbitrariness and favouring individuals who are known. However, some State governments, e.g. Maharashtra and Andhra Pradesh, have devised a criterion by providing the poor with a yellow or white card. This criterion has been used primarily for providing certain facilities, like getting rice, grain and other edibles at low cost at the fair price shop. One possibility is that the same criterion can be used for providing free care to the poor. However, so far not all the States have implemented such kind of criteria. Even issuing such a card by the government departments will involve corruption and many people may get bogus cards without satisfying the laid-down criteria. Further, there is a need for a strong administrative system or social audit that compels the private hospitals to provide adequate information to the public regarding these exemption clauses and the extent of their utilization in the respective hospitals.

So far only a few States like Andhra Pradesh, Rajasthan and Delhi have been trying to extend the tax concessions to the hospital entrepreneur. It may be worthwhile for other States to also try similar tax concessions to attract adequate investment in the sector. Care should be exercised, however, in extending such concessions to a particular sector like health. Without working out the overall resource impact of such measures, in the long run there is the chance of sub-optimal resource allocation across various welfare sectors. The innovative measures for raising resources still face the problem of constitutional barriers that do not allow enough autonomy to hospitals or hospital committees to retain funds at the point of collection. Another step in liberalization should be to overcome such barriers through appropriate amendments.

Further, the State should presumably play an important role in regulating the private sector to avoid the exploitation of consumers through unethical and sub-standard clinical care. However, at present State regulation in India has been very lax. Generally, the responsibility to govern medical practices through formulating proper codes and through their effective implementation lies with the medical councils and associations. Currently these institutions seem to lack the necessary infrastructure and do not have a set of standard norms for general and approved practices in the country.

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

Although the State and local governments from time to time have enacted various regulations and guidelines,[xxii] these are not implemented effectively, owing to low awareness among private doctors.[52] Therefore, an early implementation of the continuing education clause will be an important step, incorporating the self-regulating mechanism of peer review in clinical practices. This might help in creating an appropriate regulatory environment for the private health care sector in India.

To sum up, the current policy options pertaining to the health care sector in the post-liberalization period in India require fine-tuning to avoid consumer exploitation, increasing inequity and to provide coverage against the rising costs of care to the public.

Endnotes

[i] The impact of this falling share of Central grants on different groups of States, namely, poor, middle-income and rich States, is depicted in Table B in the Annex. Between 1990–93 the revenue expenditure indices for poor States fell from 100 to 93, 98, 75, 79 and 95, respectively, for medical and public health, and its components, namely, medical, public health, prevention and control of diseases, and family welfare. The decline is at its maximum (i.e. from 100 to 75) for public health. In the case of middle-income States, the decline below the 1990s' level is more noticeable for prevention and control of diseases and family welfare, which declined respectively from 100 to 84 and 83. For rich States, the decline was much less, from 100 to 97 for both public health and disease control.

[ii] Of the country's total hospital beds (810 000), currently 32% belong to 150 private sector corporate hospitals. The private sector, in fact, employs nearly 80% of the country's medical personnel.

[iii] This is through Indraprastha Medical Corporation and TWL Holdings of Mauritius. The latter has invested Rs 25 million for a 30% equity in a 600-bed super-speciality hospital by the Indraprastha Corporation. Likewise another NRI from the US has decided to invest Rs 27 million for setting up an advanced diagnostic centre in his place of original domicile, namely, Delhi.

[iv] Guntur in Andhra Pradesh, for instance, will benefit from a joint venture by Indian Hospital Corporation Limited and NRI-owned Soumya Medicare International, through a 250-bed super-speciality hospital.

[v] The Apollo hospitals were the pioneers, starting back in 1983, with a super-speciality covering some 50 medical specialities and a turnover of Rs 161 020 million in 1996. This group has expanded, for instance in major towns like Chennai, Hyderabad, New Delhi, Ranchi, Madurai and Nellore. It aimed to open hospitals by mid-1998 in Mumbai, Pune and Ahmedabad. The group has earmarked about Rs 12 500 million to build over 100 hospitals in 16 metropolitan areas, 32 speciality care hospitals in big cities and others in smaller towns. The fact that the market potential has been very well utilized by Apollo is evident from its operating profit margins in 1996, which remained around 35% in Chennai and 38% in Delhi.

[vi] The all-India estimates of the National Sample Survey Organisation (NSSO) indicate that average medical and non-medical expenditure per treatment by source of treatment has increased considerably in recent years. The estimates indicate, for instance, that between 1986–87 to 1995–96, there was an increase of 12.42 and 119%, respectively, for government and private sources in rural India. In urban India, the corresponding increase has been, respectively, 60.56 and 119.05%.[11,12] Likewise, some other studies also indicate the rising nature of medical costs in recent years.[13,14]

[vii] Some of the foreign and Indian partners in these tie-ups include, respectively, Guardian Royal Exchange and Cholamandalam group, Chubb group and Kotak Securities, Standard Life and HDFC, Royal Sun Alliance and DCM Shriram Consolidated, Prudential Insurance and ICICI, AIG and Tatas, General Accident and Bombay Dyeing, Commercial Union and the Hindustan Times group, Cigna and Ranbaxy, Metlife and MA Chidembaran group, GIO and Sanmar group, and Canada Life and 20th Century Finance.

[vii] Currently the health Directorates function like any other government department. By converting them into public sector undertakings, the administrative autonomy will be increased both in terms of deployment of personnel and their pay scales, although a major portion of expenditure of these undertakings will continue to be borne by the State budgets.

[ix] This is despite the fact that Rs 8330 million is being spent on the health sector by the State government, which is second only to education.

[x] The partners in this process of private sector participation in Tamil Nadu include India Cements, Ramco group, Ashok Leyland, Sterlite Industries, TVS Suzki, Lucas TVS, Dharani Group, Thiruarooran Sugars and Nepc Group. Other partners in this process include Spic, MRF Limited, Rane and Indian Oil Corporation. These industrial houses aim at taking care of a varying number of PHCs, taluk or district hospitals: India Cements (15 PHCs), Chettinadu Cements (9), Ramco Group (5 PHCs and one taluk hospital), Ashok Leyland (5–6), Sterlite Industries (6 PHCs and one district hospital), TVS Suzuki (5), Lucas TVS (2–3), Dharni Group (3), Thiruarooran Sugars (2), NEPC Group (2).

[xi] At one point, the State government of Andhra Pradesh also favoured the privatization of two PHCs in each district, which it intended to hand over to private parties or NGOs in each district. It was thought that the government could provide 80% of the required funds. It was also thought that more PHCs could be entrusted to private organizations if the proposal was found feasible. However, so far this idea has not been implemented in the State.

[xii] The States of Rajasthan and Himachal Pradesh have even toyed with the system of contractual appointments for doctors and paramedics. In Rajasthan, doctors were appointed in rural areas on a contractual basis. Under the scheme any doctor (even retired ones) could seek a contractual appointment through a committee comprising a Chief Medical Officer, Health Officer and the District Collector. In Himachal Pradesh, an all-India open recruitment was adopted to supplement the requirements of doctors in the remote hilly areas. However, this latter system did not perform well owing to the non-willingness of doctors to work in remote areas. There was a tendency for contract doctors to vanish after collecting their salaries, leaving the message that they have gone to a neighbouring village. But it was observed that such doctors usually returned only to collect their salaries.

[xiii] Recently the Kerala State Government has been trying to overcome the problem caused by the constitutional clause which requires that the funds should go initially to State treasury and then to the Committee.

[xiv] These are development bonds used as an instrument for saving.

[xv] These include four categories designated as A, B, C and D. Respectively, these cover charitable institutions willing to install at least one diagnostic or curative plant/equipment in the list approved by the State government (category A), other charitable institutions not covered in this category (category B), institutions willing to set up speciality hospitals approved by the State government for a particular use (category C), and other hospitals and nursing homes run on commercial lines (category D).

[xvi] The import liberalization on medical equipment, especially on equipment components, has facilitated the growth of equipment assembly in the country, rather than the import of the fully manufactured equipment which otherwise would attract higher duties.[25]

[xvii] This increasing demand for high-tech treatment has also accelerated the growth in the production of health care equipment including consumables, hospital equipment supplies and medical electronics. In fact, in 1994–95 the Indian market for medical equipment was estimated to be around Rs 8000 million, and is growing at around 10–15% in volume terms.[25]

[xviii] In the context of a developed country, for instance the UK,

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

the recent reforms towards introducing private mechanisms in the public sector have been associated with substantial transaction costs, including the cost of writing contracts, additional managerial staff deployment at various levels, monitoring their implementation and thus overall higher administrative costs in the post-reform phase.[29] It is estimated that following the reforms, administrative and management overhead costs in the National Health Services (NHS) in the UK have doubled from their previous 5–6% of total health service expenditure.[30]

[xix] The IRDA bill was passed by the upper and lower house of the Indian Parliament on December 2 and December 8, 1999, respectively. This controversial bill opens the insurance sector to private and foreign investors. The bill allows for an equity participation for investors up to 26% of total capital. The various clauses of the bill mandate that preference may be given to companies which take up life insurance as well as providing health cover to individuals or group of individuals. Under the bill: (1) The insurance companies have to deploy a major portion (up to 50%) of their investable funds in the infrastructure and social sectors; (2) all new companies should provide insurance policies for crops, the rural inhabitants, workers in the unorganized sectors, and economically vulnerable and backward classes; and (3) in case of failure to comply with the above social obligations, companies registered under the IRDA will attract a penalty of Rs 2.5 million, and in the event of subsequent failure to comply they may even be deregistered.

[xx] This is based on the personal discussion of the author with the concerned officials in the teaching hospitals of Rajasthan.

[xxi] Since these tax concessions amount to an indirect expenditure by the government, it would be useful to estimate revenues forgone through these concessions, especially to derive an exact estimate of total government expenditure on the sector. Likewise, there is also a need to estimate the amount indirectly spent by the government in providing tax concessions to health schemes of private companies.

[xxii] These include acts such as the Indian Medical Council Act, Code of Ethics, International Code of Ethics, Declaration of Geneva, Consumer Protection Act, Drugs and Cosmetics Act, Dangerous Drug Act, Drug Control Act, Pharmacy Act, Drug Price Control Act, Nursing Home Act, Bureau of Indian Standards and Public Nuisances Act.

References

1 Cornia GA, Jolly R, Stewart F. *Adjustment with a human face.* Vols I and II. Oxford: Oxford University Press, 1988.
2 Prabhu KS. The impact of Structural Adjustment on Social Sector Expenditure: Evidence From Indian States. In: Rao CHH, Linnemann H (eds). *Economic reforms and poverty alleviation in India.* New Delhi: Sage Publications, 1996.
3 Duggal R, Sunil N, Vadair A. Health expenditure across States – Part I. *Economic and Political Weekly* 1995; **XXX** (15): 834–44.
4 Duggal R, Sunil N, Vadair A. Health expenditure across States – Part II. *Economic and Political Weekly* 1995; **XXX** (16): 901–8.
5 National Institute of Public Finance and Policy (NIPFP). *Structural Adjustment Programme – Its impact on the health sector.* New Delhi: NIPFP, 1993.
6 Sudhir U. Government health care network starved of funds. *The Economic Times*, August 21, 1997.
7 Mukhopadhya A. 75 percent of FDI approvals may be in health sector. *The Times of India*, October 20, 1997.
8 *The Hindu.* Crucial role of corporate hospitals in health care. July 31, 1997, p. 17.
9 Pal P, Viswanathan V. Cashing in on health. *Business Standard*, October 8, 1997, p. 3.
10 Viswanathan V. The high premium on health. *Business Standard*, October 8, 1997, p. 3.
11 National Sample Survey Organisation (NSSO). *Morbidity and treatment of ailments.* New Delhi: Government of India, Department of Statistics, 1998.
12 Government of India. Morbidity and utilisation of medical services, NSS 42 round (1986–87). *Sarvekshna*, no. 51. Dept. of Statistics, New Delhi, 1992.
13 Rane WV. Sharp rise after decontrol. *Economic and Political Weekly*, November 25, 1995, Bombay.
14 Voluntary Health Association of India. *Independent Commission on Health in India.* New Delhi: VHAI, 1997.
15 World Bank. *World Development Report 1996.* New York: Oxford University Press, for the World Bank, 1996.
16 Government of India. *Report of the Health Survey and Development Committee.* New Delhi: Manager of Publications, 1946.
17 *The Times of India.* Tamil Nadu seeks corporate help in maintaining government health centres. November 1, 1997.
18 Hamine P. Committee issues guidelines for privatization of health centers. *The Free Press Journal*, October 2, 1998.
19 Purohit BC, Mohan R. New directions for public health financing. *Economic and Political Weekly* 1996; **XXXI** (8): 450–3.
20 Lakhotia S. A clean bill of health. *The Economic Times*, September 14, 1997.
21 *The Hindu.* IMA to monitor free service by corporate hospitals. January 29, 1998.
22 *The Hindustan Times.* Government demand in violation of contract. November 4, 1997.
23 *The Hindustan Times.* Government dithers at cost of poor patients. November 16, 1997.
24 *The Pioneer.* Indian medical industry takes off. January 31, 1998, p. 3.
25 Pal P. The right diagnostics. *Business Standard*, October 8, 1997, p. 3.
26 Purohit BC. Structural adjustment and health care sector in India: some policy issues in Financing. *QEH Working Paper* No. 2 [online at www2.qeh.ox.ac.uk/research/qehwp, accessed November 26, 2000], University of Oxford, April 1997.
27 Broomberg J. Managing the health care market in developing countries: prospects and problems. *Health Policy and Planning* 1994; **9**: 237–51.
28 Sappington D, Stiglitz JE. Information and regulation. In: Bailey E (eds). *Public regulation: new perspectives on institutions and policies.* Cambridge, MA: MIT Press, 1988.
29 LeGrand J. Evaluating the NHS reforms. In: Robinson R, LeGrand J (eds). *Evaluating the NHS Reforms.* London: Kings Fund Institute, 1994.
30 Health Policy Network (HPN). *In practice: the NHS market.* London: National Health Service Support Federation UK, 1995.
31 World Bank. *Financing health services in developing countries: an agenda for reform.* Washington, DC: World Bank, 1987.
32 World Bank. *World Development Report 1993: Investing in health.* New York, NY: Oxford University Press for the World Bank, 1993.
33 Cook P, Kirkpatrick C. Privatization in less developed countries: an overview. In: Cook P, Kirkpatrick C (eds). *Privatization in less developed countries.* London: Harvester Wheatsheaf, 1988.
34 McGreevey WP. *Social security in Latin America: issues and options for the World Bank.* World Bank Report No. 8456-LAC. Washington, DC: World Bank, 1990.
35 Griffin GC. *Health sector Financing in Asia.* World Bank Report No. IDP-68. Washington, DC: World Bank, 1990.
36 Bennett S, Mills AJ. Health insurance and the private sector. In: *Report of the workshop on the Public/Private Mix for Health Care in Developing Countries.* Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, 1993.
37 Viveros-Long A. Changes in health financing: the Chilean experience. *Social Science and Medicine* 1986; **22**: 379–85.
38 Yang B. Issues in health care delivery: the case of Korea. Paper presented at World Bank Seminar on Health Financing and the Role of Health Insurance, Bali, Indonesia, 1990.
39 Lewis MA, Kenney G. *The private sector and family planning in developing countries: its role, achievements and potential.* Washington, DC: The Urban Institute, 1988.

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

[40] Lewis MA, Miller TR. Public-private partnership in water supply and sanitation in sub-Saharan Africa. *Health Policy and Planning* 1987; **2**: 70–9.
[41] Gwynne G, Zschock D. *Health care financing in Latin America and the Caribbean 1985–89: findings and recommendations*. New York: Department of Economics, State University of New York at Stony Brook, 1989.
[42] Arrow KJ. Uncertainty and welfare economics of medical care. *American Economic Review* 1963; **53**: 941–73.
[43] World Health Organization. *The public/private mix in national health systems and the role of Ministries of Health*. Report of a meeting held at the Hacienda Cocoya, State of Morelos, Mexico, 22–26 July. Geneva: WHO, 1991.
[44] McPake B, Ngalanda Banda EE. Contracting out of health services in developing dountries. *Health Policy and Planning* 1994; **9**: 25–30.
[45] Bennett S. Promoting the private sector: a review of developing country trends. *Health Policy and Planning* 1992; **7**: 97–110.
[46] Liu Y, Hsaio WC, Li Q, Liu X, Ren M. Transformation of China's rural health care financing. *Social Science and Medicine* 1995; **41**: 1085–93.
[47] Krishnan TN. Hospitalisation insurance: a proposal. *Economic and Political Weekly*, April 13, 1996, Bombay.
[48] Purohit BC. The cost benefit analysis of a loan scheme: a case study of Rangabelia Project. *Community Development Journal* 1995; **30**: 66–72.
[49] Purohit BC. Private voluntary health sector in India. *Asian Economic Review* 1996; **XXXVII** (2): 297–311.
[50] Purohit BC. Private voluntary health sector in India: some issues in sustainability. *IDSJ Working Paper* No. 68. Jaipur, India: Institute of Development Studies, Jaipur, 1996.
[51] Purohit BC. Sustainability of voluntary sector in India. *Health For The Millions* 1996; 22, May–June: 19.
[52] Bhat R. Regulating the private health care sector: the case of the Indian Consumer Protection Act. *Health Policy and Planning* 1996; **11**: 265–79.
[53] Tulasidhar VB. Expenditure compression and health sector outlays. *Economic and Political Weekly* 1993; November 6: 2473–7.

Acknowledgements

This study was initiated during the author's stay as visiting South Asian Scholar in 1996–97 at Queen Elizabeth House, University of Oxford, UK. The author is grateful to Dr Barbara Harris White for her encouragement and valuable comments. Thanks are due to an anonymous referee for valuable comments on an earlier draft of this paper.

Biography

Brijesh C Purohit, BSc, MA, PhD (Economics), joined the Administrative Staff College Of India (ASCI), Hyderabad, India, in November 1997. Prior to joining ASCI, in October 1996–March 1997 he was a visiting South Asian scholar at Queen Elizabeth House, University of Oxford. He began his career in 1986 and worked as a researcher at the Center for Policy Research, New Delhi (1986), an economist at the National Institute of Public Finance and Policy, New Delhi (1986–90), an Associate Professor at the Indian Institute of Health Management Research, Jaipur (1990–96), and a Fellow at the Institute of Development Studies, Jaipur (1996). He has published a book on *Management of urban local finance in non-octroi states*. His areas of interest include health economics and financing, public and corporate finance.

Correspondence: Brijesh C Purohit, Faculty member, Social Service Area, Administrative Staff College of India, Bella Vista, Rajbhavan Road, Hyderabad-500 082, India.

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024

Annex

Table A. Growth of health expenditure in India (Rs million)

Year	Medical and public health[a]	Medical	Public health	Prevention and control of diseases	Family welfare
Absolute expenditure					
1984–85[b]	32628.6	23030.3	7797.8	5123.8	7427.8
1984–85 (Index)	100.00	100.00	100.00	100.00	100.00
1985–86	105.45	105.69	102.87	95.88	113.73
1986–87	111.13	112.64	104.34	98.19	113.90
1987–88	113.57	117.44	101.65	104.65	115.60
1988–89	119.13	123.81	105.32	109.05	115.28
1989–90	126.13	133.33	114.06	n.a.	132.64
1990–91	135.05	144.36	112.79	106.13	134.39
1991–92 R	129.95	137.68	110.23	100.45	143.85
1992–93 B	130.42	137.21	111.58	98.35	126.99

[a] Total expenditure. In the case of remaining items expenditure shown is revenue expenditure.
[b] Absolute amount for the year 1984–85 at constant 1991–92 prices.
Source: Ref. 53.

Table B. Impact of expenditure compression on health expenditures of different groups of States, at constant 1991–92 prices (Index 1989–90 = 100)

Category	1984–85	1986	1987	1988	1989	1990	1991	1992 R	1993 B
Medical and public health									
All states	78	82	86	88	93	100	106	102	102
Poor	67	69	77	78	87	100	98	93	93
Middle-income	86	90	94	93	94	100	115	108	103
Rich	84	90	90	95	98	100	107	107	103
Medical									
All states	75	79	84	88	93	100	108	103	103
Poor	65	67	75	78	88	100	102	96	98
Middle-income	84	89	94	93	94	100	113	106	107
Rich	79	85	86	94	97	100	111	110	105
Public health									
All states	88	90	91	89	92	100	99	97	98
Poor	74	75	81	78	82	100	84	81	75
Middle-income	95	94	95	94	96	100	126	121	137
Rich	99	103	100	98	100	100	98	98	97
Prevention and control of diseases									
All states	87	84	86	91	95	100	93	88	86
Poor	71	72	76	79	81	100	92	86	79
Middle-income	86	88	90	91	93	100	83	79	84
Rich	120	99	98	115	121	100	103	99	97
Family welfare									
All states	75	86	86	87	87	100	101	108	96
Poor	78	86	91	92	90	100	122	130	95
Middle-income	63	79	76	83	85	100	81	88	83
Rich	88	93	90	84	83	100	94	100	109

Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh are included in the poor category. Andhra Pradesh, Assam, Karnakata, Kerala, Tamil Nadu and West Bengal are considered middle-income states. Gujarat, Haryana, Maharastra and Punjab are the rich states.
Source: Ref. 53.

Downloaded from https://academic.oup.com/heapol/article/16/1/87/617069 by guest on 19 April 2024