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## **Public Sector and Efficiency: Are they Mutually Exclusive? An Alternative Policy Framework to Improve the Efficiency of Public Health Care System in Tamil Nadu, India**

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### **Abstract**

Tamil Nadu state in India, like Kerala, has a well-knit public health care system. However, its performance is constrained by inadequate funding adversely affecting the poor for whom facilities are intended. Drawing lessons from international experience, this paper provides an alternative policy framework suiting local milieu to improve its efficiency.

**Key Words:** *Tamil Nadu; health care system; efficiency; financing.*

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## **Introduction**

Under the Constitution of India, health is a State subject and each State has its own health care delivery system, developed on the basis of the overall framework provided by the Bhole Committee (1946). Indian States are far more independent now than they were in the past. This new found independence has led a few of them to bring out separate State health policies in order to pursue their own goals and objectives; Karnataka did it in 2000 and Kerala is in the process while others may follow it soon.

State governments finance the bulk (96.9%) of curative hospital care, as well as a significant share of expenditure involved in operating the primary health care infrastructure besides bearing costs of non-hospital services in rural areas (World Bank, 1995). They have no role to play in the formulation and designs of national disease control programs but do retain the responsibility for implementing such programs. In the case of reproductive health, the Center is responsible for program design and monitoring while the States are responsible for its implementation.

The Central Government's responsibility consists of policy making, planning, guiding, evaluating and coordinating the work of various health authorities in addition to supporting various schemes through several funding mechanisms. It also initiates several national and disease control programs to cover a range of communicable diseases, vaccine preventable diseases and some non-communicable diseases like iodine deficiency, blindness, diabetes etc. Besides, the Center finances different components of the government health expenditure such as primary health care (PHC) facilities (Center's share in 1991-92 was 99.7%), capital investment (49.7%), medical education and research (41.7%), family welfare (22.6%), insurance (18.2%), administration (11%) and hospitals (3.1%). Its budgetary allocation for health remained stagnant for several years now and the overall contribution of Central resources to public health funding is about 15%.

Tamil Nadu is one of the two Indian States (the other being Kerala) where health care infrastructure is considered to be good (Government of India, 1997). The public sector has a dominant presence here and owns 78% of the hospitals, 44.6% dispensaries and 77.7% of the beds in the State (Bhat, 1991). However, only about 30% of the patients actually seek care from this sector (Gumber, 1994; World Bank, 1995). PHCs, in particular, account for extremely low level (3 to 4%) of illness episodes (Prabhu, 1997). Public health care sector is unable to treat even those who report at the health centers (The Hindu, 1999<sub>a</sub>); This can be construed as a signal to indicate inefficiency because the core of mutable factors influencing the utilization stems out of supply side efficiency (Wensing et al, 1998). The persistent failure of the public health care system to provide efficient service to the people has already led the people to believe that the public sector and efficiency are mutually exclusive.

This trend has to be reversed because the State cannot afford to waste resources. An efficient public health care delivery system is essential to serve the poor better especially when a third of the population earns income well below the subsistence level. An efficient public health care system also guards the society at large against any private market failures. Re-establishing social equity is all the more relevant now because the impending second and third generation economic reforms in the State is likely to inflate the proportion of people below the poverty line. It is in this context, this paper attempts to provide an alternative policy framework for Tamil Nadu to improve the efficiency of its public health care system.

### The Concept of Efficiency

Efficiency in general economic terminology means absence of waste, or using the resources as effectively as possible to satisfy people's needs and desires (Samuelson and Nordhaus, 1992). It carries varied connotations in health care depending upon the context in which it is employed (World Bank, 1987; Berman and Sakai, 1993; Mahapatra and Berman,

1994; Hsiao, 1995; Rannan-Eliya and Somanathan, 1999; WHO, 1999). Defining efficiency with respect to public health care sector is trickier because it is people-oriented rather than profit-oriented. Client-consumers in this case often try to influence supply behavior and the staff too behaves differently as they assume a much broader role than their private counterparts. All these, however, do not imply that efficiency is irrelevant to public health care units. They do have targets and objectives and failure to accomplish them should be construed as inefficiency. They also perform curative role much similar to the private sector.

The State policy concerning health care in India is to provide health care to the entire population through integrated health services. The basic framework of the country's public health care sector was initially determined in tune with this policy (FRCH, 1987). The objective of individual government health care units, planned on the basis of population norm set by Government of India, is to cater to the entire demand arising out of their target population. Any deviation from this objective may be termed as inefficiency in a broader sense. Misallocation of resources between the primary, secondary and tertiary sectors gives rise to allocative inefficiency while an imbalance between installed capacity and recurrent resources to maintain it lead to technical inefficiency. Over-centralization of financial decision-making and under-funding of specific complementary inputs (such as drugs) can be cited as examples of X-inefficiency.

#### Sources of Inefficiency

Basically, there are three major reasons for the sub-optimal functioning of public health care system in Tamil Nadu. First, the system itself is imperfect and it doesn't fit into the desired normative framework (Government of India, 1997<sub>a</sub>; Government of India, 1997<sub>b</sub>). For instance, the actual number of Community Health Centers (CHCs) falls short of the required number by 81.8% and the extent of deviation is such that each Community Health Center (CHC) in the State serves a much higher proportion (5.5 times) of population than its own capacity would allow (a CHC is meant to serve a population of 100,000). Second, the existing public health care units lack certain essential facilities. Nearly 40% of the Sub-centers do not have proper building and about 5,000 (out of 8,681) of them are left without male health workers. Similarly, 58.6% of the PHCs do not have laboratory technicians. The supply of materials is based more on the availability of resources than on any demand assessment; the level of inadequacy in the State is estimated to be in the range of 0.8-48.8% (World Bank, 1995). Third, there is no optimum balance in the use of resources and the use of manpower is disproportionate to the use of other inputs. The share of manpower in total health care expenditure in the State has increased from 51.6% in 1975-78 to 63.0% in 1985-88. As against this, certain facilities remain idle either due to lack of complementary inputs or due to lack of maintenance.

An imperfect system induces selective over-utilization of some centers and/or facilities and the ultimate result is crowding, poor quality, corruption and nepotism. Resource shortage, on the other hand, creates idle capacity in the form of unused buildings and underused manpower and machinery. Unbalanced use of resources excludes a specific sub-group of population from using the services. As a result, patients either have to make repeated visits to the health care centers or are forced to seek care from the private sector.

All the above problems are mere symptoms of the deep-rooted resource inadequacy. So far, the population-based resource allocation at the national level has been detrimental to Tamil Nadu due to a decelerated growth of the State's population; in other words, effective population control acted as a disincentive here. The State has also failed to raise its own resources triggering a continuous fall in the recurrent healthcare expenditure; the rate of decline was found to be 7.6% (NCAER, 1993). The worst victim has been the non-hospital rural health care centers owing to a pro-hospital bias in resource allocation.

The immediate consequence is that the rural poor, the targeted beneficiary of the public sector, ended up spending considerably on travel to make use of this 'free service' either because they had to make repeated attempts to seek care here or to seek care elsewhere. Seeking care from

a far off place leads to considerable loss of income through wastage of time. The loss is significant for rural poor because a vast majority of them are agricultural casual laborers. The places where the patients actually seek care are often crowded and the seriously ill patients are left unattended, as patient prioritization is not based on the severity of illness in such cases.

On the demand side, morbidity in Tamil Nadu has been on the rise; rural and urban morbidity have grown at a rate of 23.4% and 12% respectively between 1973-74 and 1990-91. At this rate, the resources must have grown at a rate of around 20%, if not more. But, the reality has been different and the resource availability hasn't been in tune with the demand. This is despite the fact there has been a tremendous escalation of health care costs during this period. One can now imagine the quality of care at the public health care centers; naturally, the utilization declined.

## **Alternative Policy Framework**

### The Context

The context in which the public health care system in Tamil Nadu is operating is important to evolve an alternative policy framework. Tamil Nadu is one of the front-runner States in implementing the New Economic Policy of 1991 concentrating its efforts on industrial sector with the comparative neglect of the social sector with the overall aim of enhancing the economic growth. Health is a residual sector here absorbing shocks rather than inducing one. Of late, the State is trying hard to inject certain reform elements into the health sector. For instance, drug distribution to government health care centers is now done through a separate autonomous body within the government. It is functioning well as the health centers can now place the order directly with this body bypassing several other intermediaries resulting in uninterrupted drug supply.

The State has also recently come out with a comprehensive health care scheme benefiting the rural population (The Hindu, 1999<sub>a</sub>; The Hindu, 1999<sub>b</sub>). According to this scheme, as many as 50 camps would be organized every month in each district and a strong team of doctors would render curative services for a host of diseases and health problems. The scheme will help an estimated 11.8% of the population who remains untreated. Very recently in 2001, the government also introduced user fee on certain services such as parking, visiting patients during certain time etc. However, its impact is not immediately known, as it is a very recent development.

On the financing front, private out-of-pocket resources account for about 75% of the total health expenditure in the State and are found to be a significant source of financing health care even in rural areas. Government of India seems to have an eye on this resource when it talks about rational user fee policy and health insurance (Government of India, 2001). Evolution of a rational user fee policy and allowing health care units to provide high quality care at affordable cost form part of the Center's broad strategy to gradually phase out non-merit subsidies. Private insurance is also taking shape after the passage of Insurance Regulatory and Development Authority Bill 1999 in Parliament recently.

What is missing in all these measures, whether initiated by the Center or the State, is a comprehensive reform package emerging from and relevant to the health sector. A holistic, not the piece-meal, approach is required to resolve the issues at hand. In the absence of it, any measure, even if it contains reform-type elements, will be viewed as a spill over from other sectors.

### Political Decentralization

The Central Government enacted the 73<sup>rd</sup> Constitutional Amendment Act of India, 1992 empowering the local self-governments called *panchayats*. Since individual States brought out their own Act in this regard, they differ in terms of power, type of functions and number of subjects brought under the control of *panchayats*. States also differ in terms of the level of

devolution - decentralization stopped at the district level in Gujarat but reached up to the villages in Kerala. Kerala is the only Indian State where devolution has taken the full shape wherein political, administrative and financial responsibilities were transferred to the periphery (i.e. the village). In spite of this devolution, Kerala lags behind Karnataka in terms of the number of subjects transferred.

Tamil Nadu ranks far below Kerala and Karnataka in all aspects of devolution. Unlike Kerala, *Panchayati Raj* system in Tamil Nadu does not geographically match with the public health care system. While each village *panchayat* in Kerala has a Primary Health Center (PHC), a PHC covers 4 or 5 *panchayats* in Tamil Nadu. Therefore, the transfer of health care system to the local bodies, even if the State Government so desires, may not be as smooth as in the case of Kerala.

Since the *panchayats* in Tamil Nadu are smaller in size, they cannot be as resourceful as their counterparts in Kerala as the resource allocation to *panchayats* is based on population norm. Moreover, Kerala, unlike Tamil Nadu, devolved 35-40% of State Plan outlay to the projects drawn by the *panchayats* (Isaac, 2000). It means that individual village *panchayats* in Kerala control resources up to US\$0.15 million annually (Varatharajan et al, 2001); *panchayats* in Tamil Nadu control not even a tenth of this.

#### Kerala-Tamil Nadu Comparison

Although Tamil Nadu is comparable with Kerala in terms of several human development indicators (some experts even predict that the State might overtake Kerala in about 20 years or so from now), 'Kerala model of development' still remains unique and it is difficult to replicate it elsewhere. The similarity between Tamil Nadu and Kerala ends with their achievements in the fields of health and education. Otherwise, there are a lot of dissimilarities between them including the paths chosen by the two States to achieve what they achieved so far. High literacy, equitable development, strong political system, healthy life style and a well functioning public (Allopathic and *Ayurvedic*) health care system have all contributed to the attainment of good health indicators in Kerala. In contrast, Tamil Nadu had poor literacy, high degree of poverty and inequitable development with serious rural-urban, rich-poor and male-female differences when the health indicators started showing up. But, Tamil Nadu had better economic growth indicators. One factor that was common between the two States was a well functioning public health care system.

#### The Policy Framework

Given the concerns and the context, it appears that an ideal policy framework for Tamil Nadu should be inclusive (broad risk pooling base), rural-centric, decentralized and community-oriented. All said and done, Tamil Nadu is struggling to cope with the decentralization package because its political system is weak and individual-oriented. Due to this reason, it is the healthcare system not the political system that is calling the shots here. Hence, it is more appropriate for this State to approach the political system from healthcare system than the other way around. Unless the *Panchayati Raj* system in Tamil Nadu is restructured, the reform can only be centered on healthcare system and the *panchayats* can be thought of as a stakeholder within the healthcare system controlling a portion of healthcare (out of pocket) resources. The policy framework is devised based on this understanding.

Although the health system is calling the shots at present and is likely to do so in the near future as well, one cannot discount *panchayats'* stake although the pace of decentralization in Tamil Nadu does not match with that of Kerala. Moreover, the framework has to be rural-centric because over 70% of the people in the State are in rural areas and are employed in unorganized sector. The proposed framework consists of three components – development of a service package, decentralization and resource mobilization.

### *1. Development of a Service Package*

For any healthcare system to work, it is essential that the potential users know clearly what is to be expected from it so that any failure or mismatch can be reported to an appropriate forum. At present in Tamil Nadu, the description of the public healthcare system itself is vague and its functions are ill defined - people expect 'everything' from it and end up getting 'nothing'. Even the Comprehensive Health Care Scheme, well intended though, fits into this paradigm. The slogans of 'Health for All' and 'Right to Health' can be meaningful only when the government healthcare centers are in a position to provide at least a well-defined package of basic minimum services at all times and failure to adhere to it must be immediately addressed. Such a service package should be devised at the local level with the involvement of the community and the concerned healthcare center (The center is accountable only when it has a hand in the preparation of the package). Announcing the package to the potential users is equally important in order to eliminate any information asymmetry. Providers should display the list of services provided and the user fee particulars concerning the services, if any.

Ensuring a center-specific package acts as a kind of referral system because same service will not be available at two different levels. When the required services are available locally, there will not be any need to use the higher-level service as in that case the patients will have to spend considerable time, energy and money in addition to the loss of productivity. All said and done, defining a service package suiting local *milieu* is a necessary but not a sufficient condition for an improved performance. Sufficiency condition can be met only when the required finance is available.

### *2. Decentralization*

Decentralized decision-making is a crucial factor for this policy to work. Decentralization is the most common organizational approach to improve the efficiency as it is considered as the first step to inform the local managers of the consequences of their actions and provide incentive to improve their performance. The Andhra Pradesh *Vaidya Vidhan Parishad* (APVVP) experiment in India, hospital autonomy in Indonesia and Kenya have all shown that decentralization leads to technical efficiency and improvement in quality of care due to increased availability of supplies and improvements in maintenance of building and equipment (Chawla and George, 1996; Chawla et al, 1996). Limited autonomy to public healthcare centers can be a successful option for Tamil Nadu because the staff is found to be sincere and earlier attempts of decentralization succeeded here (Murthy, 1999).

Decentralization does not mean detachment of local units from the main stream and there can be a coordinating mechanism to monitor and guide their activities. The local centers should also be in a position to have a linkage with private and traditional sectors so that the services available in those sectors can be utilized on a referral basis. The first signs of a decentralized approach in the State are already visible in the form of "Target-free approach". Under this approach, the targets for various routine functions like sterilization, IUDs, immunization etc. are fixed locally unlike the earlier practice of centrally fixed targets.

### *3. Resource Mobilization*

Successful functioning of a service package requires sustainable financial support. Tax financing is a tested traditional mechanism in India forcing the health sector to compete with other government sectors for funds. Total quantum of tax resources available for allocation depends on the overall performance of the economy (GNP) and decisions on relative share of each sector are based on political bargaining. When the economy expands, the growth in health sector allocation often fails to match the pace but, when it contracts, the health sector allocation takes nose-dive.

A limited tax base coupled with escalating health care cost force the public sector to prioritize the allocations in which case the relative powers of different interest groups and

bureaucratic rules of operation can greatly influence the decisions. More often, expensive and technology-dependent new treatments have strong advocates and increasingly more resources are dedicated to specialized care at the expense of preventive and primary care. In the end, there are disproportionate resource allocations between urban & rural, rich & poor, curative & preventive and hospital & non-hospital. The immediate fallout is the unintended user financing in the form of out-of-pocket expense. Thus, tax financing is not the most dependable option as it is insensitive to healthcare needs. International experience has also shown that it has limited potential. In Canada, for instance, people are concerned about the escalating healthcare costs whereas the provincial governments are busy imposing 'caps' on healthcare outlays (Evans and Law, 1995). In the case of UK, the tight health budget resulted in long queues for elective surgeries and thus, a higher proportion of the population is feeling dissatisfied by the system.

An alternative option could be to tap the private resources into the public sector. There are several ways of doing it; Indian planners seem to think that private health insurance and user fees are the ideal ones. While private insurance has the potential to tap the private out-of-pocket resources to a limited extent, past experiences have shown that it doesn't help the public sector to plough back the same resources for its use. Therefore, private insurance only assists the private providers. Moreover, it promotes inequality; in the US, for instance, the elderly and the disabled are left uncovered because they are the high financial risks. The poor, unemployed and other low-income populations cannot afford the insurance premium and therefore, are left out. As a result, 14% of Americans still remain uninsured despite the existence of *Medicare* and *Medicaid* programs to cover the 'left-out' population (Hsiao, 1999). Private insurance also leads to escalation of medical care costs. Even a partial coverage of private insurance has led to significant health care expenditure inflation in Australia. In the US too, insurance companies try hard to control costs through managed care and there is no mechanism to control the costs incurred by the patients on drugs and co-payments. The cost inflation is ascribed more to price than quantity changes.

Insurance may be a better option if managed by the government or the trustees. Social insurance has all the good characteristics of community financing and private insurance eliminating their shortcomings. The resource mobilization objective is adequately fulfilled in almost all the countries where social insurance finds a place including the developing nations such as Latin American countries (Chawla and Berman, 1996). It can be a useful option particularly when the package of services is pre-determined. However, there will be considerable disquiet when people in serious medical need are refused treatment because of their inability to pay or lack of insurance. Often, the most vulnerable groups of the population are agricultural workers and those engaged in the informal sector; Tamil Nadu has plenty of them.

The Bamako Initiative, by far the largest initiative at the global level, has demonstrated that it is possible to support primary healthcare services and improve their quality by charging modest fees. However, practical experience with user financing is mixed and its potential in recovering the cost is found to vary a lot among different countries (McPake et al, 1993; Gilson, 1997; Shaw, 1995; Jarret and Ofosu-Amaah, 1992; Reddy and Vandemoortele, 1996; Litvack and Bodart, 1993). Nevertheless, the trend is improving with the passage of time. If we analyze the data pertaining to different countries, one can find that the estimated average recovery from user fees is increasing over a period of time. While the recovery was to the extent of 11.3% of the recurrent cost during the 1980's, it was 31.6% during the 1990's. Yet, there is a significant role for local factors in determining its success and many of the theoretical benefits of user fee are not realized because of implementation difficulties. Success also depends on whether or not the introduction of user fee is accompanied by a change in quality of care. Quality improvements in health care delivery can more than offset the effect of price increases even among the poor (Litvack and Bodart, 1993).

Given this scenario, a locally managed prepayment arrangement through *panchayats*, with the entire population as members, could be an ideal option for Tamil Nadu public healthcare

system. The Chinese Co-operative Medical System (CMS), during the 1980's, demonstrated that the community was able to finance 66% of the healthcare expenditure with 90% rural participation (Liu et al, 1995). The Bamako Initiative has also provided some evidence favoring community financing. Community financing provides a stable source of revenue for services and the flow of funds into the health sector is visible. It can also help establish patients' rights as customers of the healthcare providers even while combining risk pooling with mutual support by allocating services according to need. With the help of *Panchayati Raj Institutions* (local bodies), community financing can operate in pursuance of government health policy goals and at the same time, it can maintain a degree of independence from government. In the end, community financing can be associated with the efficient provision of services.

Even a nominal contribution of a rupee (2 cents) per person per month in Tamil Nadu State could mean an increase of 17.7% in healthcare resources, given its per capita annual healthcare expenditure of Rs. 67.92 (US \$ 1.45). Such an increase would be significant because many districts here spend much below the State average and the World Bank estimates indicate that an increase of about 15% in health expenditure would achieve a reasonable improvement in efficiency (World Bank, 1995). The membership fee alone could fetch a sum of Rs. 20,000-30,000 (US \$ 425-640) per month to each PHC, which is many times higher than its regular monthly budget for maintenance. From the community's point of view, the contribution to community financing is less than 1% of the poorest pensioner's monthly income (old-age pension in the State is Rs. 75 or US \$ 1.60 per month). For a family of 5, a mere Rs. 5 (11 cents) per month would not be a burden as it falls far short of what they currently spend to access 'free' govt. healthcare.

In addition to the resources generated through community financing, some users can be charged for certain services that are not included in the minimum package. Those who pay for their service would draw benefits equivalent to their spending over and above what is provided through the package. The amount thus generated can be used to bring in new technology. However, it should be noted here that user fee could be an option only for a new service/technology that is to be introduced for the first time and not for the existing one. By this, only the (new) services are differentiated not the individuals as it is difficult in practice to separate the rich from the poor. By differentiating the services, the clients will elect themselves as rich or poor. On the provider side, the staff should be given productivity-linked incentives in accordance with the level of services (including the packaged ones) they provide.

## **Conclusions**

This paper provided an alternative policy framework for Tamil Nadu to improve the performance of its public healthcare system. The entire framework is based on the premise that everything else will fall in place once the resource gap is narrowed down. The whole approach is to enhance productivity without eroding equity. The framework essentially addresses three issues. First, it is related to the provision of services at the public healthcare centers. It is suggested that the services to be offered should be well defined taking into account the capability of the center and in tune with local needs; the patient-consumers should be informed accordingly. The next issue is with respect to the roles of the healthcare delivery staff and the community. The suggestion is that the local units need some level of autonomy (and appropriate incentives) to cope with the local settings so as to fulfill the local needs and aspirations besides enhancing the efficiency. The last one is related to the financing mechanism. The framework suggests that, to start with, financing and the management of recurrent expenditure should be done at the local level through the *panchayats*.

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