CHAPTER 7
SUMMARY AND CONCLUSION

7.1 Summary

Infrastructure is basic physical and organizational structures needed for the operation of a society or enterprise or the services and facilities necessary for an economy to function. It can be generally defined as the set of interconnected structural elements that provide framework supporting an entire structure of development. It is an important term for judging a country or region's development. Viewed functionally, infrastructure facilitates the production of goods and services, and also the distribution of finished products to markets, as well as basic social services such as schools and hospitals. The health care system, including hospitals, the financing of healthcare, including health insurance, the systems for regulation and testing of medications and medical procedures, the system for training, inspection and professional discipline of doctors and other medical professionals, public health monitoring and regulations, as well as co-ordination of measures taken during public health emergencies such as epidemics all is a part of social infrastructure. This study has focused on one of the crucial aspects of infrastructure and that is provision of healthcare services sector taking into account the efficiency of private hospitals.

In India, infrastructure facilities and services have been generally provided within a centralized framework by public sector agencies like railways, health, education etc. The rationale for government intervention in these activities is based on certain features of the market mechanism described as “market failures” as also larger developmental objectives. However, just as market failure is well known and recognized, there has been increasing
evidence of government failure. This failure has been attributed to the crunch of resources because of which the state is withdrawing its role from various activities and reduced efficiency of the public sector agencies in healthcare and such other facilities. The response to this emerging feature is two-fold: One is the increasing role of the private sector due to various incentives announced by the state and second is the efficiency of the private sector agencies especially performance of the hospitals providing all the different facilities which has paved the way for its tremendous growth in recent years.

The private sector services in healthcare are more preferred by the people especially in urban areas. Hence, there is a growing concern regarding the efficiency of the private healthcare services. Therefore, we attempted in this study, a critical understanding of the efficiency of private hospitals. Further, we have examined the implications of this unregulated growth of the private hospitals and the need for increasing efficiency in the use of resources in the inefficient hospitals as the hospitals have more control over the inputs rather than the outputs.

To provide guidelines to examine these issues, we reviewed the literature on the various studies done at international level and in India on hospital efficiency. We focused on the hospital studies which were conducted using Data Envelopment Analysis (DEA), a non-parametric approach which gives an in-depth analysis about the efficiency of the private hospitals. As stated earlier, a major objective of the study is to examine the efficiency of the private hospitals and setting benchmarks of the way of functioning of the efficient hospitals for the inefficient ones to follow. But, in India we see dearth of literature on efficiency studies. Also, there is a lot of wastage of resources resulting into inefficiency. It is in this context, it was relevant to study the physical standards that exist in the private hospitals and to measure technical efficiency of the private hospitals.
As far as physical standards are concerned we see that there is neither regulation nor defined standards laid down for the functioning of private hospitals in Mumbai. In spite of these issues due to lack of better alternative people turn to private healthcare facilities. Some of the problems envisioned by the users are already discussed in detail in the earlier chapters. So people turn to private hospitals for quality services, being into vicinity area etc. Hence, in recent times, private hospitals have flourished by leaps and bounds though charges i.e. cost of treatment are high.

The study has therefore also focused on understanding user’s perception on the quality of care of the private hospitals whether they have utilized the service for inpatient or outpatient treatment. People especially in a city of fast life like Mumbai are always short of time. Therefore, being rich or poor or middle class they prefer private for their prompt and quality services; as they use more of advanced machines, have a good infrastructure as well as maintain cleanliness, availability of competent doctors and good reported behavior of other staff as well are all the different reasons being quoted for utilizing more of the private hospital facility as compared to public provision which mal functions with inefficiency on a number of counts.

The methodology adopted for the study to measure the efficiency of private hospitals in the context of Mumbai city was as follows:

- Analyzing the attributes of the private hospitals to understand the status of existing physical standards in private hospitals.
- To study the efficiency of private hospitals: technical and scale efficiency were measured by using the DEA approach.
- Input and output slack values were calculated in order to observe the efficiency savings possible by using the resources in its optimal manner.

- Another important step was to identify efficient private hospital peer groups which then served as benchmarks for the inefficient hospitals.

- User’s responses collected through interview schedules showed the utilization patterns and the level of quality of care provided by the private hospital.

The study has shown that only 29% of the sample private hospitals in Mumbai are technically efficient and around 71% of them are technically inefficient. These findings are perfectly in line with other findings from other countries. Its implications with regards to healthcare provision (given the limited resources in the health sector) are of serious concern.

The study has demonstrated that DEA is an essential tool for identifying the most and least efficient hospitals, and strategies for saving resources/inputs and/or increasing output. DEA can be used in identifying efficient operating practices and efficient strategies, setting targets/bench marks for relatively inefficient hospitals, monitoring effects of health sector reforms on efficiency over a period of time, and resource allocation{Kirigia, etal, (2001) and Boussifiane, etal, (1991)}.

Finally, twenty five private hospitals in the sample study were found inefficient. This means there is considerable room for improvement in efficiency levels. According to our findings, hospital ownership will have a crucial role in these improvements. Therefore, private service providers and policy makers should understand the basic grounds of efficiency under each type of hospital ownerships.
DEA not only helps healthcare policy makers and managers to answer the question ‘How well are the hospitals doing on efficiency front’ but also ‘how much and in what areas efficiency levels can improve?’ It suggests performance targets. In addition, it identifies the hospitals which are performing best and their operating practices can then be examined to establish a guide to ‘best practice’ for others to emulate. The potential benefits of replicating this kind of study in other parts of Maharashtra and indeed in other states cannot be over-emphasized.

DEA has been fruitfully used in many countries in Asia and Europe and in the United States to shed light on the efficiency of health facilities and programs. The current study is an attempt to contribute to this literature. The study has revealed the prevalence of high levels of technical and scale inefficiencies. In a country like us with very low levels of per capita expenditure on health and very limited access to health services, the current levels of inefficiency would seriously impede the government's initiatives to increase the population's access to quality health care services. Furthermore, progress towards the achievement of the cherished health policy objectives, and global and regional health targets would be seriously hampered.

It is therefore, recommended that the causes of the inefficiencies be unpacked and necessary efficiency measures be instituted to augment the government's efforts to address the health care access issues in the country. To estimate the level of efficiency savings in the overall health system, it is also advisable to undertake a similar study in all types of health facilities in the country.
In any efficiency analysis studies to be conducted in Mumbai in the future, more emphasis should be laid on collecting information on the quantities of all the main outputs and inputs (including drugs) and the average or median prices per unit of each input, from all public and private health facilities (health centers and hospitals), to facilitate measurement of total economic efficiencies (i.e. technical plus allocative efficiencies). Furthermore, in order to aid monitoring and evaluation of the effects of different health care reforms on the efficiency of individual healthcare facilities over time through the Malmquist Productivity Index analysis, it would be necessary to collect time series data for before and after introduction of specific reforms in this sector. The Malmquist Productivity Index helps to measure explicitly total factor productivity. It decomposes productivity growth into efficiency change and technical change. The former component is considered to be evidence of catching up to the efficiency frontier, while the latter component is considered to be evidence of innovation. Application of Malmquist Productivity Index in the passenger Road Transportation have been robust and indicated the need for organizational restructuring of Maharashtra State Road Transport Corporation (Karne, 2004)

The empirical findings of this study can be summarized as follows:

- Results of this study pertaining to physical standards in the private hospitals indicate that private hospitals are found to be functioning without any minimum requirements for physical standards.

- The application of DEA to measure efficiency indicate that there is technical inefficiency in a number of private hospitals. Resources (inputs) are not utilized efficiently to produce maximum output. Very few hospitals are fully efficient and are functioning on the efficiency frontier.
❖ Scale inefficiency shown by increasing returns to scale for a number of private hospitals indicate that some of the private hospitals are too small for the scale of operations it undertakes.

❖ User’s responses indicated that in Mumbai majority of the sample population used private hospital facilities for indoor or outdoor treatment. (Note: this result is limited for the users in the sample study). This shows that private sector has to be regulated and there is a need for certain minimum standards in order to improve efficiency of the hospitals.

❖ The feedback given by the users also indicated preference for the private hospitals for a number of reasons like the quality of care they provided, better infrastructure, vicinity of the private hospital etc. Also due to problems with the public hospitals like inconvenient timings or location, long queues, rude staff, inadequate equipment’s, poorly maintained equipment’s, lack of manpower etc. are the reasons quoted behind use of private hospital facility in spite of lack of affordability.

❖ The input slack values for those inefficient private hospitals shows the areas wherein they can improve by minimizing the wastage of resources (inputs) and earn efficiency savings. They need to understand the functioning of their efficient peer group(s) of hospitals to become efficient. As far as scale efficiency is concerned they have to expand in size in order to become scale efficient. This however seems difficult in case of Mumbai city which is always squeezed of space.
Hence, this study proposes that the government should lay down certain minimum standards and regulation for the private hospitals in Mumbai so as to improve the quality of private healthcare services at reasonable costs. More importantly the results strongly make the case for sharing the resources and inputs in public and private healthcare facilities. The Public-Private Partnership (PPP) model which has been already adopted in some regions for provision of healthcare services could be encouraged. Perhaps after taking the interest of the poor people into consideration.

Efficiency measurement should be undertaken for every private hospital as resources wasted can be used to improve the status of individuals in a society where there is already a lot of unmet demand for health care. Also, wherever deemed fit the government can work in partnership with the private hospitals or transfer resources from inefficient hospitals to the efficient ones to realize the principle of pareto efficiency.

In brief, this will require clear policy discussions on behalf of the government and the agreement of the private hospitals for standards and regulations to work with efficiency. Also, accreditation of private hospitals can be one of the ways in order to minimize wastage of resources and maximize efficiency. Finally, in a city like Mumbai coordination between the citizen’s groups, organizations like Center for Enquiry in Health and Allied Themes (CEHAT) and the Ministry of Health (MoH) of the government only can seek to establish efficiency in the functioning of the private hospitals. As in the present situation where we see reduced role of the state in launching new hospitals in public sector, definitely the private hospitals add value for the increasing numbers in the moisture, polluted and vendor full street city of Mumbai which will always demand health care as a monthly grocery commodity and the private hospitals commodifying and profiteering on it.
7.2 Concluding Remarks

Healthcare is at an influx of paradigm shifts in terms of changing morbidity patterns and increasing disease burden for both rural and urban India. On the supply side there has been uneven distribution of healthcare infrastructure and resources posing various challenges to the sector. A multi-pronged approach from key stakeholders is necessary to address the issue. Both the public and private sector need to work in tandem to make healthcare available, accessible and affordable to all. India and especially Mumbai in this study’s context would need to work out various solutions towards this end.

Way Forward

Public Sector and Government Interventions – Improving the Outreach and Quality of Care:

1. The government needs to plan to undertake building super-specialty tertiary care hospitals with research and education centers across the country. These would cater to the weaker sections making high end clinical care available to the masses.

2. Encouraging initiatives on public private partnerships for healthcare providers.

3. The government should continue flagship programs such as Rashtriya Swasthya Bima Yojana (RSBY) which is a central Government new health insurance scheme for the Below Poverty Line (BPL) families in the unorganized sector and state government Rajiv Gandhi
Jeevandayee Arogya Yojana for the Above Poverty Line (APL) and Below Poverty Line (BPL) families introduced in Maharashtra.

4. At the base of the pyramid it is inevitable to improve availability of medical staff in rural far-flung and inaccessible areas especially doctors, specialists and para-medicals and they also should be given proper monetary incentives to serve in underserved areas.

5. Through National Health Systems Resource Centre (NHSRC), the NRHM (National Rural Health Mission) is encouraging hospitals to go for a sustained Quality Accreditation program. The CGHS (Central Government Health Services) has made it mandatory for all healthcare institutions and diagnostic centers providing care to have either National Accreditation Board for Hospitals (NABH) / The National Accreditation Board for Testing and Calibration Laboratories (NABL) certification.

6. Making it mandatory for all hospitals and diagnostic services to have a registration process which will lay down some minimum standards criteria. This will help in the provision of better quality services.

7. Providing a common discussion platform for all quality councils which enforce, assess and maintain quality standards in hospitals and healthcare institutions.
Private Sector Interventions – Areas of Attention:

1. Private sector should work in tandem with the government on PPP initiatives to educate the latter for developing more sustainable delivery models.

2. Undertake the utilization of resources wherever possible by diversifying in such activities like training medical professionals, nursing, and paramedical staff regarding the best possible use of inputs at their disposal to provide quality care.

3. To form a common healthcare forum / platform to corroborate all efforts for policy discussions by involving the different stakeholders in healthcare provision.

4. Work with the government to encourage better penetration and utilization of health insurance schemes. Private hospitals should be open towards accreditation and make it credentialing mandatory for Medical Professionals while recruiting/appointing will also help to ensure quality standards.

Ultimately, be it public or private sector, efficiency in healthcare is inevitable. For majority of the population in India, good health is still a distant dream. Huge burden of treatment costs along with inefficiency in the private hospitals as brought out by the present research study can affect the pocket of a person belonging to any income bracket. Therefore, let all of the stakeholders in health join hands to make the dream health for all a reality for the majority. Efficiency in healthcare provision is the essential solution for serving the health interests of the people.
In this changing world, with unique challenges that threaten the health and well-being of the population, it is imperative that the government and community collectively rise to face these challenges simultaneously, inclusively and sustainably. Social determinants of health and economic issues must be dealt with a consensus on ethical principles – universalism, justice, dignity, security and human rights. This approach will be of valuable service to humanity in realizing the dream of Right to Health.

“The health of people is the foundation upon which all their happiness and all their powers as a state depend.”

– Benjamin Disraeli, British Prime Minister.

Finally, the ultimate yardstick for success in healthcare would be if every Indian, from a remote hamlet in Bihar to the city of Mumbai, experiences the change in the form of better health outcome.