

## PEST Analysis of the Health Care Sector in Coimbatore District

Dr. B Prasanna Soundari

Assistant Professor, G R Damodaran Academy of Management, Civil Aerodrome Post, Avanashi Road, Neelambur, Coimbatore – 641062

\*Corresponding Author

Dr. B Prasanna Soundari

Email: [bprasannas@hotmail.com](mailto:bprasannas@hotmail.com)

**Abstract:** The research seeks to identify the key macro environmental forces that dictate the health care scenario of Coimbatore a global medical destination in the Indian state of Tamilnadu. An exploratory study involving 350 samples has been considered to scan the macro environment by capitalising on the PEST analysis. Medical tourism an economic factor and increased subspecialisation in medical science a technical factor are the key drivers of Coimbatore health care sector while the lack of prescribing preventive care a social factor is the key restraining force as understood by the analysis of the user perceptions relied upon to quantify the PEST analysis.

**Keywords:** Driving Force, PEST Analysis, Restraining Force, User Perspective

### INTRODUCTION

The Indian health care sector has redefined its image from being an extension of British Raj to that of a global medical destination. The driving force behind such a transition being innovative business models with an aim towards Universal Health Coverage. The market driven economy has given way to entrepreneurial activities and the private sector is expected to contribute 80% - 85% of the US\$86 billion investments required in healthcare till 2025 [9]. The Government's foothold can be understood from the National Health Bill 2009 that emphasise the right to health [16]. Further the state administered health care mechanism has enabled Tamilnadu, Andhra Pradesh and Chhattisgarh to reduce urban rural disparity by providing health care at low cost. Especially Coimbatore a metro in Tamilnadu has carved a niche for itself in providing speciality medical care and aims to be a health city backed by the Confederation of Indian Industry – Coimbatore Zone. The attainment of the vision mandates continuous monitoring of the environment to stimulate successful strategic inventions. Environmental scans are recently endorsed as valuable tool in health care decision making and are of paramount importance in strategy formulation [6, 17]. The PEST directs a strategy that certainly aligns to the sectors environment in which one operates, a straight forward approach to thrive [7, 8].

### PEST ANALYSIS: A TOOL TO IDENTIFY DRIVING AND RESTRAINING FORCES.

The literature scans ascertains "ETPS – (Economic, Technical, Political and Social)" by Francis J. Aguilar to be the forerunner of macro environment checks. The principal of deciphering the macro

environment remains same though the acronym ETPS can be rearranged as PEST or STEP based on refinements required. The PEST analysis being generic in nature has withstood the test of time by absorbing revisions forwarded by the business environment. Identification of the most important issues that impacts an organisation or industry is fundamental to PEST analysis and involves expert judgement. PEST analysis seems simple and common but challenging to conduct in order to be useful for decision making [12]. Categorising factors that has positive or negative influence is qualitative but isolation of key drivers and key restraining forces necessitates the quantification of data. PEST does not limit itself with understanding key environmental influencers it also helps in recognising long term drivers of change or examine the different impact of environmental factor on a sector either in past or future context [14]. The functionality of the tool lies in the fact that it directs the change drivers to be aligned with performance oriented[13].

The current study deploys PEST to identify the propelling and prohibitive forces of Coimbatore district's health care sector. PEST analysis being proactive paves way to address pressing issues of health care sector [4]. The private hospitals also have started to adopt PEST analysis like never before [2]. The interesting facet of PEST is it is useful and relevant for complex and simple businesses or propositions [1].

### RESEARCH METHODOLOGY

An exploratory study was undertaken to comprehend the perception of patients availing the services of Coimbatore hospitals regarding the

healthcare settings. After a systematic review the health of allopathic care was examined by administering a structured questionnaire (English/Vernacular language) to the patients. A pilot study conducted by selecting 50 rural and 50 urban respondents revealed a Cronbach's alpha score of 0.682, which is more than 0.6 that assures a reliable data.

## Sampling Process

### 1. Population

Elements : Patients  
 Sampling Units : Hospitals, then Patients  
 Extent : Coimbatore District

### 2. Sampling Frame

Indian Medical Association-Coimbatore Branch Register, Primary Health Center – Coimbatore District list and Coimbatore Corporation Urban Post/Dispensary list.

### 3. Sample Size

350 respondents comprising of 175 samples from urban Coimbatore and the remaining 175 samples from rural Coimbatore.

### 4. Sampling Method

A two stage sampling with stratification was adopted. The stratification helps to inculcate orderliness to the non-probability sampling employed. The sampling frame identified 280 hospitals out of which 131 was located within the city and treated as urban hospitals. The remaining 149 hospitals were representative of rural Coimbatore .i.e. outside the city limits. 35 hospitals each from urban and rural stratum was selected at the first stage and from these 70 hospitals, 5 respondents were selected for exit interview based on judgment of the care providers to generate 350 samples.

### Quantifying PEST: Leveraging User Perspective

The political, economic, social and technical forces that drives the Coimbatore district has been identified from the secondary sources in the first phase. The user perceptions regarding the carefully chosen forces are gathered by distributing the questionnaire by way of personal interview in the second phase. The questionnaire adhered to five point Likert type scale to measure the patient's perceptions.

The political features considered for the study were private hospitals have improved the quality of health care, consumer rights has brought a positive change in quality of health care, medical tourism aids in improving quality of health care, Government's "Right to health care" fosters improvement in quality and corruption reduces the accessibility to health care. The economic dimensions were verified by gaining insights

on health care has become a commercial sector, cost spend on medical technology are economical, cost of drugs are economical, medical insurance has brought a change in health care and over the counter drugs improves quality of health care. The social factors comprises of preventive care is not prescribed, increased mobility has made the access of care much easier, quality of health care is same in urban and rural areas, increasing public expectations has induced a quality health care system and population of India is a problem to quality of care. The technical aspects encompasses test even for small ailments is a good medical practice, increased levels of subspecialisation improves the quality of health care, advances in medical IT has reduced medical errors, Knife less and needle less surgeries (Laproscopy) has improved the quality of health care, technology in medical science has reduced the waiting time of patients and increased use of standard care protocols has improved quality of health care.

## ANALYSIS AND DISCUSSIONS

The weighted average was favoured to analyse the data as the researcher had communicated the weights as 5,4,3,2 and 1 for strongly agree, agree, neutral, disagree and strongly disagree respectively to the respondents during the data collection process. The restraining forces were few in number and the reverse scaling were applied. The economic factor, health care has become a commercial sector and the two social factors preventive care is not prescribed and population of India is a problem to quality care are the restraining factors embedded in the present study.

The sub factors of political, economic, social and technical entities are scored using weights and ranked among the specific aspect. The political factor medical tourism aids in improving quality of health care is awarded first rank with a score of 1498. The economic factor over the counter drugs improves quality of health care is ranked first among the driving forces with a score of 1302 and health care has become a commercial sector being a sole restraining factor is awarded first rank. The driving force increased mobility has made the access of care much easier has been awarded first rank while among the restraining forces of social factor preventive care is not prescribed has been awarded first rank with 1515 and 890 respectively. Similar to political factor the technical aspect has not included any restraining forces and the sub factor increased levels of subspecialisation improves the quality of health care is ranked first with a score of 1567. The average of the driving and restraining forces has helped identify the impact of a force as high or low. The score above the average being interpreted as high and the score below the average being classified as low. The economic forces are not

viewed in a positive manner as understood from the impact column of table no. 1 although Tamilnadu is acknowledged as a health paradise shaped by best drug

distribution model and chief minister’s comprehensive health insurance scheme [10, 15].

**Table-1: The macro environment scores of Coimbatore health care sector**

	Sub Factors	Scores	Rank	Force	Impact
Political	Private hospitals has improved the quality of health care	1434	3	Driving	High
	Consumer rights has brought a positive change in quality of health care	1419	4	Driving	High
	Medical tourism aids in improving quality of health care	1498	1	Driving	High
	Government’s ” Right to health care” fosters improvement in quality	1384	5	Driving	High
	Corruption reduces the accessibility to health care	1492	2	Driving	High
Economic	Health care has become a commercial sector	843	1	Restraining	Low
	Cost spend on medical technology are economical	1116	2	Driving	Low
	The costs of drugs are economical	1114	3	Driving	Low
	Medical Insurance has brought a change in health care	976	4	Driving	Low
	Over the counter drugs improves quality of health care	1302	1	Driving	Low
Social	Generally, preventive care is not prescribed	890	1	Restraining	High
	Increased mobility has made the access of care much easier	1515	1	Driving	High
	The quality of health care is same in urban and rural areas	1183	3	Driving	High
	Increasing public expectations has induced a quality health care system	1431	2	Driving	High
	Huge population of India is a problem to quality of care	882	2	Restraining	High
Technical	Test even for small ailments is a good medical practice	1334	6	Driving	Low
	Increased levels of subspecialisation improves the quality of health care	1567	1	Driving	High
	Advances in medical IT has reduced medical errors	1398	3	Driving	High
	Knife less and needle less surgeries (Laproscopy) has improved the quality of health care	1364	5	Driving	High
	Technology in medical science has reduced the waiting time of patients	1398	3	Driving	High
	Increased use of standard care protocols has improved quality of health care	1497	2	Driving	High

**Table-2: The consolidated macro environment scores of Coimbatore health care sector using weighted average**

Opinion		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Weighted Average
Political	Relative Frequency	706	689	245	96	14	-	-
	Scores	3530	2756	735	192	14	7227	4.12
Economic	Relative Frequency	180	503	465	442	160	-	-
	Scores	900	2012	1395	884	160	5351	3.05
Social	Relative Frequency	310	727	195	340	178	-	-
	Scores	1550	2908	585	680	178	5901	3.37
Technical	Relative Frequency	809	844	268	154	25	-	-
	Scores	4045	3376	804	308	25	8558	4.07

The scores arrived at in table no. 1 are transformed as average and depicted in table no.2 to reveal the big picture. The political and technical aspects have been more positively perceived when compared to economic and social factors. The highest rating have been claimed by political factor with an average of 4.12 and the least rating is given to the economic factor as implied by an average of 3.05. The point that economic and social factors include

restraining forces could have contributed towards their low rating and paves way for further research. The high impact of political and technical aspect regarding quality of care is pronounced.

**CONCLUSION**

The patient centric health care a prerequisite of the market driven economy transforms patient as co-producer of quality demanding a PEST analysis

incorporating user insights [5, 11]. The quantification of patient perception using weighted average indicates political and technical forces are powerful stimuli rather than the economic and social aspects. The key driving forces of Coimbatore health care sector are medical tourism an economic factor and increased sub specialisation in medical science a technical factor, supporting reports regarding the district [3]. Restraining forces are few in number when compared to driving forces and contributes to the low scores of economic and social dimensions. The worst restraining force as adjudged by the patients being preventive care is not prescribed reflects the opinion of Bill Gates “Treatment without prevention is simply unsustainable”. The isolated driving and restraining force structures the premise to shape Coimbatore as a health city.

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