



# COMPETITION ANALYSIS OF PRIVATE HOSPITALS IMPROVING HOSPITAL QUALITY

Dr.Nisha Joseph

Department of Commerce, Al-Ameen College, Edathala, Kerala India

**Abstract.** Competition analysis of private hospitals is essential to the long-term prosperity and expansion of medical facilities Private hospitals may improve patient care, streamline operations, and make well-informed strategic decisions by having a thorough awareness of the competitive landscape. Competition analysis of private hospitals is a phenomenological approach which provides a thorough insights into the competitive dynamics of the healthcare industry. Understanding the dominance and competitiveness of various private hospitals to find out their market shares,comparing Key performance indicators etc. Can be used for comprtitiptn analysis.Competition in health care industry is a way to improve value for patients. Stated differently, competition guarantees the availability of superior goods and services to meet consumer demands. This study provides valuable insights into market dynamics, identifies key players, and highlights opportunities and threats.

**Keywords:** Hospitals, Quality, Health Care,Competition, Intangible service, Measurement model

## 1. Introduction

Hospitals play a crucial role and its importance cannot be overstated in the healthcare sector. They are the first point of contact in case of medical emergencies. They offer a wide range of services such as emergency care, surgeries, and other medical procedures to the patients. Hospitals are also equipped with advanced medical technology and equipment, aiding in the diagnosis (Campanella et al., 2016) and treatment of a wide range of illnesses.

A healthy person finds himself as an asset and strives for a strong healthier life which aspires for basic economic and human development. Good health can be achieved only with the help of good health infrastructures which assists in designing better health care policies and promotes welfare mechanisms in the country. Health infrastructures can be coined as tangible materials, intangible services (Gaynor et al., 2011)or social capital of a country which makes possible the economic and social activities, structures public health, supports social policies etc. within or outside the environment. A health infrastructure index (Lakshmi et al. 2013) investigates health sensitivity in response to health infrastructure variables such as family welfare,

medical education, regulator of drugs, stoppage and control of major diseases etc. (Bhandari et al. 2020).

Hospital management domains in the recent years have become is extremely competitive, and incurs relative costs in response to competitive actions. Concrete multiple actions using competitive dynamics, resorted to by hospitals at times of environmental challenges helps to cope up with crises and to evolve a robust competitive dynamic strategy to examine one's own actions together with that of competitors for its survival and existence. Competition, especially among hospitals, is a crucial phenomenon that mends the quality of health care (Chang et al. 2011) and is an expensive marvel for non-cost substances.

Local healthcare markets and other hospitals normally indulge in healthy competitive happenings. Competitive interfaces are convoluted and self-motivated processes and aspires for unyielding improvements in quality and cost (Porter, 2010). However, the distinctive features of healthcare markets such as quality structural trials, process notions have made hospital competition different from competition in other markets. The restoration of health as quickly as possible with as little pain as possible is highly valued by health-care consumers and as such they are willing to pay even more for true value and in order to maximize quality.

In health care institutions, price competition is interrupted by lack of price transparency and the dominance of health care insurance which acts as a protective device from the cost consequences of their choices. Now a day the patients have little worries about the price or cost of medical care (Lisi et al., 2011) at the point of purchase. Rather, they focus on non-cost influences such as the amenities, facilities, services, and perceived quality of the service provider. Paradoxically, service providers in the competitive health care markets ignores the conventional market mechanisms (Nekoeimoghadam et al., 2016) and ponders on non-price competition such as higher quality of care, locational advantages, enjoyable comforts, and sue for latest and updated technologies without price restrictions.

Competition analysis of private hospitals is essential to the long-term prosperity and expansion of medical facilities Private hospitals may improve patient care, streamline operations, and make well-informed strategic decisions by having a thorough awareness of the competitive landscape. Competition in health care industry is a way to improve value (Ali et al., 2018) for patients. Stated differently, competition guarantees the availability of superior goods and services to meet consumer demands. This study provides valuable insights into market dynamics, identifies key players, and highlights opportunities and threats.

## 2. Review of literature

(Schmid et al., 2013)The aim of this study is to examined the role of public relation and moves to find out whether Public relation has resulted in more competitive forces that have raised the standard of hospital treatment in Germany. A homogeneous reform effect is dubious because hospitals are required to improve quality under fixed rates in order to acquire market share through various strategies. The researcher attempts to find out whether th particular impacts for several hospital types vary in ownership and level of specialisation in order to test for potential heterogeneity.

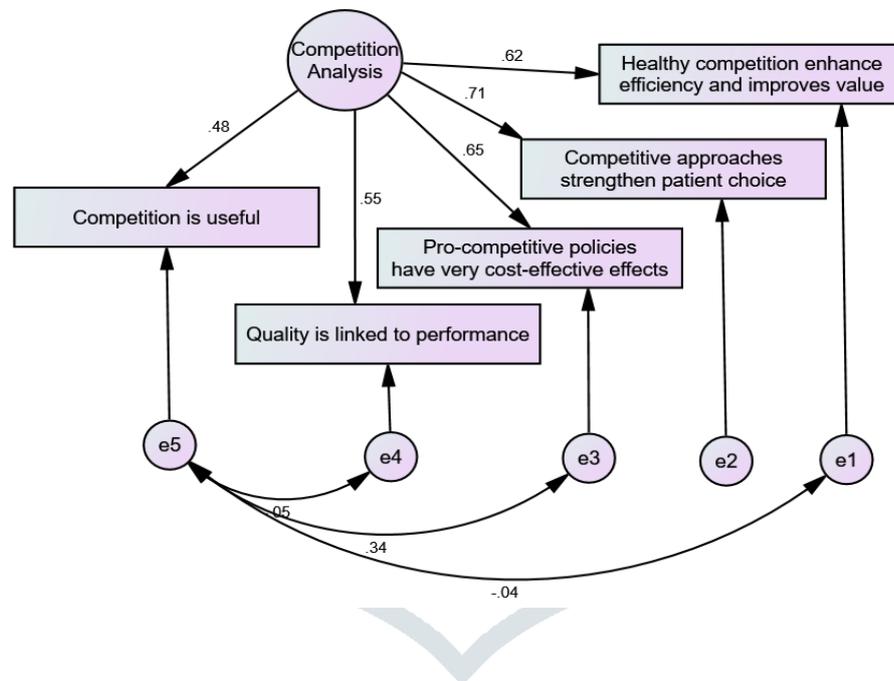
(Strumann et al., 2022) assessed the causal relationship between hospital competitiveness and care quality in Germany. The intervention is the public release of quality performance data via public reporting portals in 2008. The degree of treatment varies depending on the market structure since more competitive markets are anticipated to benefit more from the provision of performance data. A uniform impact of competition on quality is observed across all hospitals.

### 3. Methodology

This study is qualitative in nature and consists of 117 experts and chief managers of private hospitals and were selected through purposive and snowball sampling. Data collection was conducted through structured questionnaires.

### 4. Data Analysis

The latent variable indicating the construct “Competition Analysis” was measured through 5 variables. The Competition Analysis model is shown in Figure 1



Certain modification between error terms were necessary, as is indicated by double sided arrows connecting the error terms, to get better results. With a view to assess how reliable is the said measurement model in measuring the intended latent construct namely Competition Analysis the internal and composite reliability were checked.

#### 4.1 Internal Reliability

The Internal Reliability of the model indicating how strong the measuring items are holding together in measuring the respective construct was determined using Cronbach’s Alpha. The internal reliability will be achieved when the Cronbach’s Alpha exceeds 0.70.

The latent construct namely Competition Analysis were measured using responses to questionnaire items. The internal reliability represented by Cronbach's Alpha of these five items is shown in Table 1.

**Table 1 Cronbach's Alpha of Competition Analysis Response data**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.746	.752	5

The Cronbach's alpha of the 5 response items was 0.746 which is greater than 0.70. This indicates that the model possesses internal reliability.

#### 4.2 Composite Reliability

The composite reliability indicating the internal consistency of the latent variable was calculated and Table 4.62 shows the Average Variance explained (AVE) and Composite Reliability (CR) of the model explaining latent variable accessibility.

**Table 2 Average Variance and Composite Reliability of Competition Analysis of Hospitals**

	K	K <sup>2</sup>	1 - K <sup>2</sup>
Competition is useful	0.478	0.2285	0.77152
Quality is linked to performance	0.548	0.3003	0.6997
Pro-competitive policies have very cost-effective effects	0.654	0.4277	0.57228
Competitive approaches strengthen patient choice	0.711	0.5055	0.49448
Healthy competition enhance efficiency and improves value	0.618	0.3819	0.61808
Total	3.009	1.844	3.156
Average Variance Explained (AVE)		0.3688	
Composite Reliability (CR)			0.7415

The model under review was observed to have achieved composite reliability that indicates the reliability and internal consistency of the latent construct namely Competition Analysis since the CR value of 0.7415 is above the threshold value of 0.70.

#### 4.3 Convergent Validity

In the model under consideration, AVE was only 0.3688 but since composite reliability 0.7415 is higher than 0.6, convergent validity was gained.

#### 4.4 Discriminant Validity

By identifying the items' redundancy in the model through a discrepancy measure called Modification Indices (MI) and constraining the redundant pair as "free parameter estimate" for the redundant items that have high value of Modification Indices, the model has ensured discriminant validity which indicates that the measurement model of the construct namely Competition Analysis is free from redundant items.

Yet another requirement for discriminant validity is that the correlation between variables should not exceed 0.85. The correlation value exceeding 0.85 indicates that the two measures are redundant or having serious multicollinearity problem. The correlations between the variables in the model are shown in Table 3.

**Table 3 Implied Correlations between Variables of Competition****Analysis of Hospitals**

		1	2	3	4	5
1	Competition is useful	1				
2	Quality is linked to performance	0.229	1			
3	Pro-competitive policies have very cost-effective effects	0.539	0.358	1		
4	Competitive approaches strengthen patients' choice	0.340	0.390	0.465	1	
5	Healthy competition enhance efficiency and improves value	0.270	0.339	0.404	0.44	1

None of the correlations between variables in the model exceeded 0.85 which indicated no concern of multicollinearity.

#### 4.5 Construct Validity

This validity is achieved when the Fitness Indexes for a construct achieved the required level. The fitness indexes indicate how fit is the items in measuring their respective latent constructs. The fitness indices of the Competition Analysis model are pictured in Table 4.

**Table 4 Fitness Indices – Competition Analysis Model**

Competition Analysis Model		Values	df	P	Threshold Values
	Standardized RMR	0.0065			<0.08
Absolute Fit	CMIN $\chi^2$	0.729	2	0.695	p>0.05
	RMSEA	0.001			<0.08
	GFI	0.999			>0.90
Incremental fit	CFI	1.000			>0.90
	NFI	0.999			>0.90
Parsimonious fit	$\chi^2$ /DF (Discrepancy Ratio)	0.364			<5

As is obvious, all the indices are in the acceptable range, the threshold value conditions being met and hence the model is considered to be a perfect fit. The standardised regression weights with their probability values are shown in Table 5.

**Table 5 Standardised Regression Weights – Competition Analysis Model**

			SRW	P
Competition is useful	<---	Competition Analysis	0.478	***
Quality is linked to performance	<---	Competition Analysis	0.548	***
Pro-competitive policies have very cost-effective effects	<---	Competition Analysis	0.654	***
Competitive approaches strengthen patients' choice	<---	Competition Analysis	0.711	***
Healthy competition enhance efficiency and improves value	<---	Competition Analysis	0.618	***
*** indicates significant at 0.001 level				

The regression weight for the latent variable namely Competition Analysis in the prediction of measured variables is significantly different from zero at the 0.001 level (two-tailed).

## 5. Conclusion

In a healthcare environment that is changing quickly, private hospitals must analyse their competitors to remain competitive. It helps hospitals to navigate market obstacles, take advantage of growth and innovation possibilities, and strategically position themselves while optimising operations and delivering high-quality patient care. Competition analysis in private hospital sector helps to identify Identify key trends and drivers in medical technology that influences the market. It also helps to evaluate competitive positioning, and gain a thorough understanding of market dynamics. A comprehensive analysis of competition of private hospitals with the information and resources they need is very essential to succeed in a dynamic and fiercely competitive healthcare industry. Hospitals may thrive and continue to provide high-quality treatment while accomplishing their strategic goals by closely observing and evaluating the competitive environment.

## 6. References

1. Ali, M., Salehnejad, R., Mansur, M.: Hospital heterogeneity: what drives the quality of health care. *Eur. J. Health Econ.* **19**(3), 385–408 (2018).
2. Bhandari, Sudip. *Identification, Tool Development and Validation, and Assessment of Core Competencies of Public Health Professionals in Uttar Pradesh, India*. Diss. The Johns Hopkins University, 2020.
3. Campanella, P., Vukovic, V., Parente, P., Sulejmani, A., Ricciardi, W., Specchia, M.L.: The impact of Public Reporting on clinical outcomes: a systematic review and meta-analysis. *BMC Health Serv. Res.* **16**(1), 296 (2016).
4. Chang, S. M., Carey, T. S., Kato, E. U., Guise, J. M., & Sanders, G. D. (2012). Identifying research needs for improving health care. *Annals of internal medicine*, *157*(6), 439-445.
5. Gaynor, M., Town, R.J.: Competition in health care markets. In: Pauly, M., McGuire, T., Barros, P. (eds.) *Handbook of Health Economics*, vol. 2, pp. 499–637. Elsevier, North Holland (2011).

6. Lakshmi, S. T., and Dukhabandhu Sahoo. "Health infrastructure and health indicators: The case of Andhra Pradesh, India." *IOSR Journal of Humanities and Social Science* 6.6 (2013): 22-29.
7. Lisi, D., Moscone, F., Tosetti, E., Vinciotti, V.: Hospital quality interdependence in a competitive institutional environment: evidence from Italy. *Reg. Sci. Urban Econ.* **89**, 103696 (2021)
8. Nekoeimoghadam, M., amiresmaili, M. R., & izadi, A. (2016). The Competitive Analysis of the Private Hospital Industry Using Porter's Competitive Diamond Model: A Case Study in Kerman 2014. *Journal of Qualitative Research in Health Sciences*, 5(1), 29-45.
9. Porter, Michael E. "What is value in health care?." *New England Journal of Medicine* 363.26 (2010): 2477-2481.
10. Schmid, A., Ulrich, V.: Consolidation and concentration in the German hospital market: the two sides of the coin. *Health Policy* 109(3), 301–310 (2013)
11. Strumann, C., Geissler, A., Busse, R. *et al.* Can competition improve hospital quality of care? A difference-in-differences approach to evaluate the effect of increasing quality transparency on hospital quality. *Eur J Health Econ* **23**, 1229–1242 (2022). <https://doi.org/10.1007/s10198-021-01423-9>

