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Effective Governance Through Quality in Healthcare Organizations: An Empirical Study

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ABSTRACT

Conventional methods of quality audit, accreditation and awards are the key aspects of governance in delivering performance excellence. Governance needs to be encouraged and measured through the organisational excellence models. This paper makes an attempt of Malcolm Baldrige National Quality Award criteria (MBNQA) to measure and evaluate performance in the healthcare system. A total of 150 scale items were used to measure the constructs in the research framework. The model fit was determined through factor analysis, regression analysis, and coefficient parameter estimates. A total of 360 administrative executives were considered using purposive sampling technique from case healthcare organisations. The performance gap analysis revealed most of the public healthcare shown below average performance. There was a significant relationship between MBNQA dimensions. Further, the study indicated the presence of one type of strategic determinants fit to compensate for deficiencies in other. The study highlights healthcare organisations has potential implications to embracing quality management system, perform Strategic thinking and overcome issues of Governance.

Keywords: Governance, Hospitals, Performance, Quality.

1. INTRODUCTION

The growth of Indian healthcare system is mainly due to historical influence of the British, the lack of financial and physical resources in the public health sector, the rising demand for healthcare from private patients and international patients, and economic stability of India. Healthcare organisations in India are not only growing in number, but also in size, complexity, and by a variety of the health services, there is tremendous need for efficient governance through quality (Kunal et. al., 2005; Armaan 2014, Noor et al. 2015). Indian public policy makers introduced the Mudaliar Committee in 1961, which endorsed the

failures of the public healthcare system and official gateway for the prominence of the private sector. Rapid changes in social and economic fronts demand efficient healthcare delivery policy (Noor et al. 2015). However, quality is failing because organizations are fall short of their potential to improve the quality and performance outcomes (US DoC N B , 2015). This paper makes an attempt to study MBNQA (Malcolm Baldrige National Quality Award criteria (MBNQA) to promote efficient governance through quality and performance outcomes in healthcare organizations.

2. REVIEW OF RELATED LITERATURE

The concept of governance has been widely used in recent years in the analysis of changing public sector. Conceptually, the healthcare management relates to quality and performance (Gray, 2001, US DoC NBS, 2003, 2008, 2013). The quality gurus' models are the extraction of the individual guru's wisdom and experience. Deming's 14-steps plan (Deming 1986), Juran's ten steps (Pun, 1998) Crosby's 14 steps (Deming 1986) and Ishikawa's company -extensive quality control (CWQC) are examples of such models. The quality standards models outlined in international/ national standards such as ISO 9000, prescribe uniformity of quality systems. The EFQM (European Foundation for Quality Management) model also highlights the role of input, resources, policy and processes in achieving quality improvement (EFQM, 2000). The assessment models are highly structured models that envision an organization's overall performance on set criteria. Due to the quantitative approach of these models, they lend themselves to a well-defined, rigorous implementation methodology. Common to the most understanding of healthcare governance is a concept of an integrated approach. The assessment models/ Quality awards models appear to be different, but closer examination reveals some common areas (Table 1).

Table 1
Popular Quality Awards Models

<i>Factors</i>	<i>Deming Prize for Quality (1951)</i>	<i>Baldrige Quality Award (1987) MBNQA</i>	<i>European Quality Award (1991) EFQM</i>
Leadership	Organization and its management	Leadership	Leadership
Strategic quality planning	Company policy and planning	Strategic planning	Policy and strategy
Information and analysis	Collection, transmission, and management	Information and analysis	Resources
Human resource management and development	Quality control education and dissemination	Human resource development	People management
Managing process quality	Analysis and quality assurance	Process management	Processes
Standardization	Standardization	–	–
Customer focus and satisfaction	Control	Customer focus and satisfaction	People satisfaction
Quality and operational results	Effects	Business results	Business results
Impact on society	Future plans	–	Impact on society

Source: Literature Review

Healthcare organizations are very complex organizations (WHO, 2009). And their structures, processes, and management have become increasingly significant to the improvement of healthcare quality (Ovreveit, 2000; Ruiz and Simon, 2004). Excellent quality governance generates a competitive advantage for service organizations, but firms must implement a comprehensive system of quality if they are to develop efficient and reliable quality system (Andersen, et al., 2004; Yang Ching, 2006). The document analysis identified that there was a changing role of quality dimensions of Malcolm Baldrige National Quality Award Criteria (MBNQA) from 1988 to 2013 in approximately 5-years intervals that are 1988, 1992, 1997, 2003, 2008 and 2013 (US DoCNBS, 2008, 2013, and 2015). It is evident from the studies that most of the QM dimensions have described as (i) People Management (ii) Information and Analysis (iii) Customer Focus (iv) Leadership; (v) Process Management (vi) Supplier Management (vii) Planning & Strategy and (viii) Product/service Design. (D'Souza Sunil and Sequeira A.H. 2010). The core value of the MBNQA is consistent with organization development and management, as it offers the relationship between quality management and performance (US DoCNBS: 2008 & 2013; Brown, 2006; Porter, 2010). Unlike the Deming and EFQM, the MBNQA concentrate more on quality and performance outcomes which need to be studied in Indian context for effective governance in the quality healthcare system.

3. RESEARCH QUESTIONS

1. What are dimensions of MBNQA?
2. Is there any relationship between quality factors and performance of MBNQA?
3. Is it necessary to re-define healthcare governance in the purview of quality management in healthcare organizations?

4. POPULATION AND SAMPLING

The population consisted of 76 healthcare organisations, and the sample survey was derived from the database of Healthcare organisations prepared based on the official report of Medical Council of India, and it was found the majority of healthcare institutions (38 %) were concentrated in southern India. One of the Healthcare facilities was selected for the unit analysis to obtain an overall glimpse of administration, operations, standards and practices as it is uniform under the Medical Council of India. To obtain clear representation of samples from southern India, Healthcare organisations of Karnataka, Kerala, Andhra Pradesh and Tamil Nadu were purposively selected based on inclusion and exclusion criteria for this study. The study was designed with cooperation from 12 healthcare organisations. Inclusion criteria include large healthcare institution more than 500 beds, quality certified, multi-specialty, minimum five years of existence; the emergency department should have a divisional / state representation. Exclusion criteria include small healthcare organisation less than 500 beds, single specialty, super specialty, and less than five years of existence.

5. DATA COLLECTION PROCEDURE

The study population was large and unwieldy; contact with the respondents, therefore, had to make in different locations at their convenient timings. To achieve sampling uniformity the respondents at administrative level consists of 76 departmental heads, 38 administrative staff, 13 nursing superintendents,

and three medical superintendents considered through purposively sampling technique. The questionnaire consist of 70 statements on Likert scale, ranging from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. Out of 450 questionnaires, 360 were obtained in complete with a response rate of 80 percent. The validity of the instrument was obtained by experts and piloted for a small group of respondents and reliability by Cronbach's alpha.

6. RESULTS AND DISCUSSIONS

6.1. Unit Analysis of Case Healthcare Organisations

The unit analysis of healthcare institutions briefly describes glimpse of quality-related initiatives. Most of the Healthcare institutions had 750 beds and above, and therefore, are considered as large health systems. The years of existence varied from 18 to 130 considerable numbers of years in service. The 41.6 per cent of Healthcare organisations were located in urban, 33.33 percent in suburban and 25 percent in rural areas reveals that the healthcare institutions were widely spread in the geographical locations. The campus size of Healthcare organisations varied from 18 to 270 acres to provide all kind medical services and had a defined organization structure. The Healthcare institutions had invested in resources slowly including modern equipment's and technologies. About 83.33 per cent Healthcare organizations were ISO-certified and 16.66 per cent were not ISO-certified reveals that there was a strong emphasis on quality certification and commitment to providing quality assurance. About 58.33 per cent Healthcare organisations had TQM practice, and 41.67 percent were not exposed to TQM practices. This implies that the application of quality initiatives had contributed to the continuous improvement of significantly more than 50 percent of participant healthcare organisations. The 50 per cent of Healthcare organisations had a strategic planning reveals that short-term and long-term goals were aligned with customers' needs and healthcare market expectation. Most of the Healthcare organisations (83.33%) had a quality policy in place, and only a few (16.66 %) did not have a quality plan. Only minuscule percentage (16.66%) of Healthcare organisations had won quality awards, and 83.33 percent did not win any quality awards. The international patients have been flocking to India for treatment and Foreign/NRI cell for international patients attracts patients from Middle East, Asia and other parts of the world.

6.2. Reliability Analysis

Table 2
Reliability Analysis: MBNQA Dimensions

<i>MBNQA Dimensions</i>	<i>Cronbach Alpha</i>
Leadership	0.849
Strategic planning	0.951
Customer focus	0.831
Measurement, Analysis, and Knowledge Management	0.916
Workforce focus	0.951
Process management	0.943
Performance Outcomes/Results	0.882

The reliability was obtained by computing Cronbach Alpha that measures the internal consistency of the items. Owing to the multidimensionality of MBNQA, Cronbach Alpha was calculated separately, and it was ranged from 0.7 to 0.9, indicating a higher level of internal consistency (Table 2).

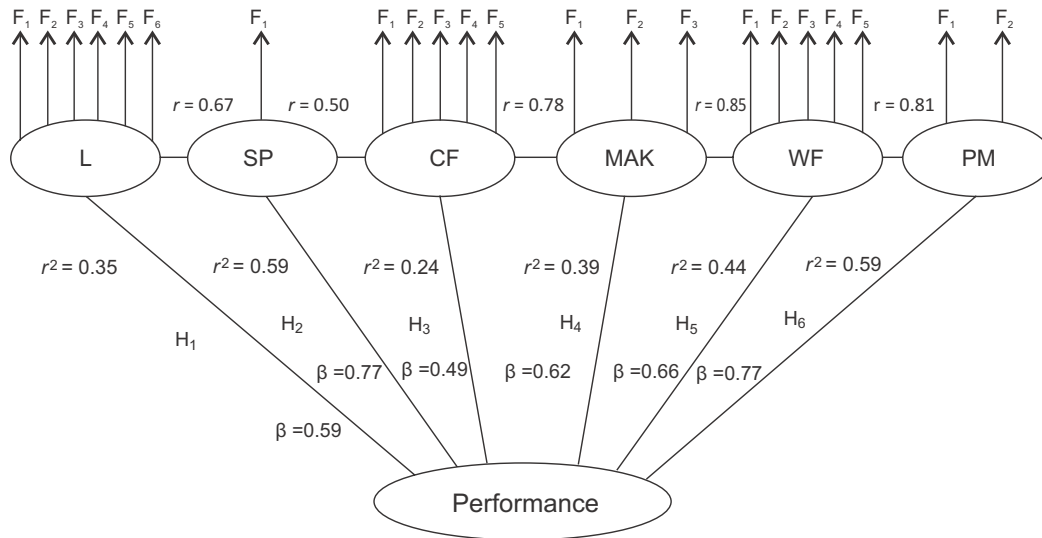


Figure 1: Measurement Model of MBNQA Dimensions

Note: L = Leadership, SP = Strategic planning, CF = Customer focus, MAK = Measurement analysis and knowledge management, WF = Workforce focus, PM = Process Management. Model fit: r^2 = regression, β = regression coefficient, r = Pearson Correlation coefficient, Significant at ($p < 0.001$).

6.3. Model Summary of MBNQA Dimensions

Table 3
Beta Coefficients of MBNQA Dimensions

MBNQA dimensions	UnStandardized Coefficients		Standardized Coefficients β (Beta)	t	Sig
	β (Beta)	Std. Error			
1. Leadership	0.730	0.088	0.593	8.330	0.000
2. Strategic planning	0.446	0.033	0.766	13.484	0.000
3. Customer focus	0.637	0.100	0.491	6.382	0.000
4. Measurement, analysis, and knowledge management	0.628	0.070	0.624	9.026	0.000
5. Workforce focus	0.571	0.057	0.661	9.930	0.000
6. Process management	0.593	0.044	0.765	13.434	0.000

Among the six dimensions of quality management, strategic planning yielded 59 per cent; process control yielded 59 per cent; workforce focus yielded 44 per cent; measurement, analysis, and knowledge management yielded 39 per cent; leadership yielded 35 per cent; and customer focus produced 24 per cent explanatory

power on performance. The estimated non- standardized coefficients standardized coefficients, and *t* statistics for the hypothesized relationship of MBNQA independent variables on performance. Concerning the dimensions, strategic planning had a significantly very high strong positive correlation ($\beta = 0.766$) then process management ($\beta = 0.765$), workforce ($\beta = 0.661$), measurement, analysis, and knowledge management ($\beta = 0.624$), leadership ($\beta = 0.593$), and customer focus ($\beta = 0.491$) on performance.

The findings showed that leadership had a significant influence on performance (H1: $t = 8.330$, $p < 0.001$). Similarly strategic planning (H2: $t = 13.48$, $p < 0.001$); customer focus (H3: $t = 6.38$, $p < 0.001$); measurement, analysis and knowledge management (H4: $t = 9.02$, $p < 0.001$); workforce focus (H5: $t = 9.9$, $p < 0.001$); and process management (H6: $t = 13.43$, $p < 0.001$) had a significantly positive influence on performance. Thus, leadership, strategic planning, customer focus, measurement, analysis and knowledge management, workforce focus, and process management had a significantly positive influence on performance.

6.4. Performance Benchmarking

The Malcolm Baldrige Model Criteria reflect the performance excellence participant healthcare organizations. Total MBNQA points indicated the performance level of the healthcare organizations (H). Of the twelve healthcare organizations, H1, H12 had highest (810) MBNQA points, and H7 had the lowest (432) MBNQA points. There was a significant number of healthcare organization had average performance (500- 750 MBNQA points, 58%). There were about five healthcare organizations had more than 750 MBNQA points, judged to be performing at golden level. The wealth of experience and knowledge of quality management available those healthcare organizations provide lessons to other healthcare organizations in achieving superior performance (Figure 2)

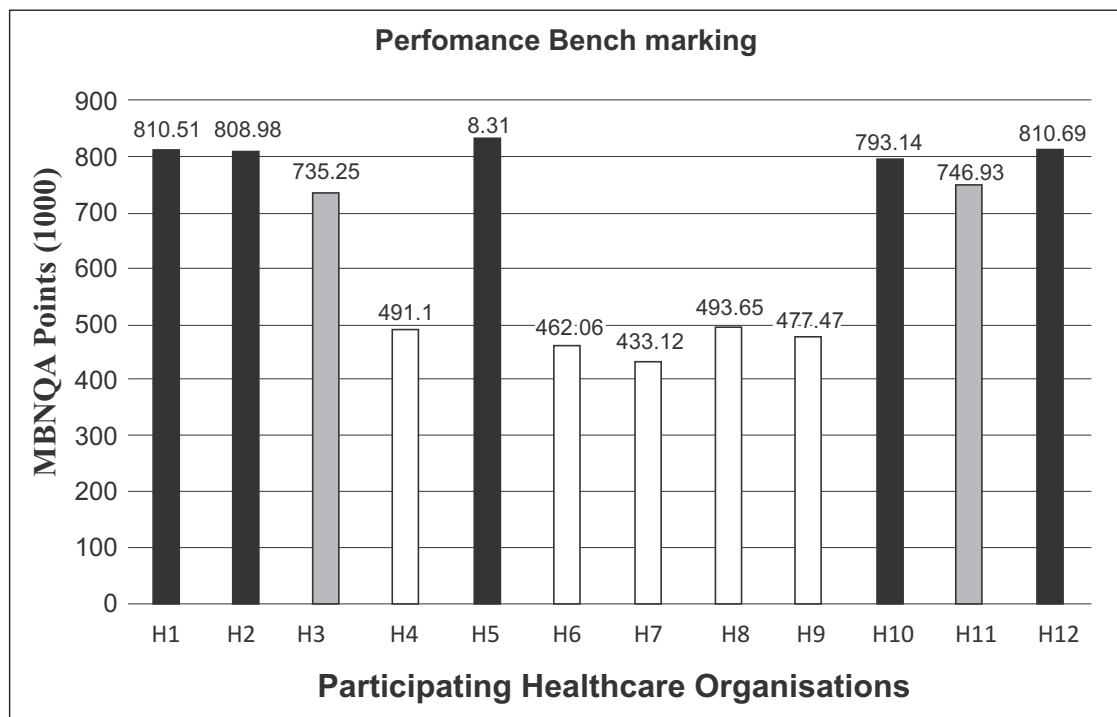


Figure 2: Performance Benchmarking

7. CONCLUSIONS

The Baldrige model has been used as a framework for quality management, with the expectation of enhancing quality initiatives in organisations through the implementation of practices that could improve quality in a systematic way to lead better governance. Agencies need to implement process improvement practices in conjunction with Baldrige model to achieve and maintain a competitive edge in quality. The results of the study highlighted strategic management and process management have a high impact on performance management. Further, strategic planning and process management required changes in weights for measuring health service quality in India and other developing economy nations. The study findings contribute to improving the outcome of healthcare service delivery where health staff needs to work in an environment of greater emphasis on accountability of quality dimensions of Malcolm Baldrige. MBNQA dimensions have the advantage of improving organizational performance by measuring what matters to the organization, increase focus on strategy and results, and monitor organization's performance. There is a scope for development of quality management framework in developing countries to improve the global health service quality. Work to develop sensitive and easily measurable indicators for monitoring changes within each health system's building blocks is ongoing (Donabedian

2005; WHO, 2009). There is a need for quality intervention regarding equity, cost, access, responsiveness, risk protection, and efficiency of the service provision. More research on excellence models should be done to answer performance excellence on which approaches are most effective, and on which "context situations" are critical to allow transfer and replication or translation. However the definition of good health governance is still very much a contested areas, so measures are used different contexts around the world. While this is not the problem itself, there can be real benefits from some standardization of approaches, especially when the made it possible for comparisons to be made. It would be, therefore, be valuable if measurements of good health governance could be encouraged through international awards for 'best practice' in 'good health management'. However, more headway in this area is probably still contingent upon the development and testing of more systematic approaches to evaluation of the quality of health management.

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