

## How to Establish Customers Satisfaction in Healthcare Industry?

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### Abstract

The focus of this study is to examine the importance and effectiveness of lean management and employee satisfaction towards customer satisfaction. The simplified and standardization of processes lean management able to eliminate unnecessary workload and increases employee satisfaction that lead to resulting positive customer satisfaction for organization. This study also designed to fulfil the previous research gap by analyze the capability of lean management and employee satisfaction towards establishing customer satisfaction in healthcare industry. Based on previous literature review, this study derived two proposition which are lean management is positively related to customer satisfaction and employee satisfaction is positively related to customers satisfaction.

**Keywords:** Employees, Lean Management, Customers, Satisfaction

### Introduction

Healthcare industry faced challenges such as rapid changing environment, increased of customer expectation and employee turnover. This industry has similarities as manufacturing sector where workers from both industries are dealing with complicated processes to deliver products or service care to end consumer. Thus, lean management implementation in healthcare industry is necessary to overcome challenges facing by healthcare industry (McIntosh et. al, 2013; Kadarova & Demecko, 2015). Malaysia government has put focus on private healthcare industry because it is a business that able to contribute to nation economy. Government has included healthcare as part of Economic Transformed Programme (ETP) and

estimated private healthcare can generate RM50.5 billion of gross national income by 2020 (Chua, 2010). In order for healthcare industry to gain revenue from domestic and global market, quality healthcare service is important key element to determine customer satisfaction. Hence, the healthcare industry need to concern about their employee's satisfaction because it gives competitive advantage towards organization. Employees who work in service industry is strongly affect customer satisfaction especially they interact with customer. Employee satisfaction is able to increase employee productivity and organization citizenship. Furthermore, high rate of employee satisfaction is able to lower the rate of medical error, reduce extra cost that incurred from unethical behaviour such as legal cost, reputation cost, recruitment and turnover cost (Collins, 2011).

Meanwhile, lean in healthcare usually is to target remove of duplicate processes, reduce patient waiting time, reduce length of patient admitted, simplified and standardization of work process, removal of unnecessary recordings and reduce medical errors (Young, 2014). Wan and Nor (2016) proposed that healthcare quality has positive relationship with customer satisfaction and development of customer loyalty. Customer satisfaction lead to develop customer loyalty where patient has high willingness to choose the same private healthcare provider for screening or treatment. Kondasani & Panda (2015) proposed that quality services that exceeding customer expectation in healthcare have shown strong relationship with customer loyalty whereby customer choose to stay with the service, willing to recommend, revisit and increase of positive word-of-mouth intention. Furthermore, study carried out by Lonial & Raju (2014) showed that service quality improved customer satisfaction and further develop to customer loyalty. Thus, the effectiveness of lean management is believed can standardize procedures and increase quality of service to gain customer satisfaction and further develop customer loyalty.

### **Customers Satisfaction in Healthcare Industry**

Healthcare service quality is measured by using PubHosQual which comprised of five aspects of patient experience in healthcare organization such as medical service, admission, overall service, social responsibility and discharge service (Aagja and Garg, 2010). Elements such as empathy, professionalism, physical environment and relationship between employee and patients should include as complement to health service measurement (Arasli et al, 2008). In Malaysia, a study regarding patients' satisfaction and their behaviour intention was carried out in private hospitals and found out that all service factors are positive related with patients' satisfaction and their dimension of service quality (tangible, assurance and empathy) are significant with patient's intention to continue using hospital service (Wan and Nor, 2016). Researchers had concluded the importance of patient satisfaction in healthcare setting because this is a measurement of quality service and also as a way to build trust between hospital and patient (Salisbury et al, 2005; Moliner, 2009). After building a strong bonding in long term relationship, patients are tend to come back to the same hospital for service which is considered as patient loyalty (Kessler and Mylod, 2011). Customer satisfaction in healthcare industry is direct related with quality service that provide by healthcare provider. However, healthcare quality is intangible and difficult to measure because customer evaluation is based on actions and moods (Naidu, 2009). Thus, healthcare provider needs to keep improving in healthcare service quality in term of hospitality service from the healthcare employee, instruments and technology to remain competitive in the market. Asma et al (2016) stated

that customer satisfaction had become more challenging to healthcare service provider because increased of living standards resulting increased of customer's expectation.

### **The Importance of Employee Satisfaction**

Employee satisfaction is the feeling of happiness, positive emotional and obtained motivation from job task (Omar & Zakaria, 2016). Employee productivity is direct related with degree of satisfaction which later resulting better patient experience (Peltier & Dahl, 2009). Pantouvakis and Mpogiatzidis (2013) proposed factors that influenced employee satisfaction included social factor (supervisor and peer), individual factor (personality, marital status and age), job task (autonomy, benefits and challenges), and organizational factor (corporate culture, work procedures and technologies). Employee satisfaction affects labour market behaviour, employee absenteeism and staff turnover (Chen et al, 2012). Registered staff nurse turnover rate in Malaysia was increased more than 50% which reported attrition rate of 400 nurses in 2005 to 1049 nurses in 2010 due to low degree of job satisfaction in workplace (Choong et al, 2012). Work stress is a crucial element to de-motivate employee and reduced job satisfaction. Employee who work in healthcare industry need to expose to high level of stress and there was a case reported that a young doctor found dead in restroom due to work stress on April 2012 (Mohd et al, 2014). Furthermore, in Australia, 53% of general practitioner had left their workplace due to occupational stress and heavy workload (Van et al, 2006). Besides, that, employee in healthcare industry needs to work long hours and handling complicated workflow was directly decrease job motivation. Notional Health Service (NHS) in United Kingdom reported that healthcare employees had lower job satisfaction due to excessive of working hours, administrative work and paper work (Appleton et al, 1998).

### **The Importance of Lean Management**

Lean management is work as a team where every department in organization need to participate to achieve goals. Employees are asset of organization; highly motivated and secured working environment is able to increase employee's satisfaction, higher productivity, better organization commitment and higher organization citizenship (Yee et. al, 2008). Dun et. al (2016) stated that lean management provide prominent outcome to create a feasible work flow for employees to improve continuously not only in customer focus but is high quality services which later contribute to higher customer satisfaction and less unnecessary cost incurred in operation. Graban (2016) proposed that lean management (LM) is interconnected and can beneficial to organization in term of employee satisfaction and customer satisfaction. For example, higher employee satisfaction improved service quality, reduced turnover rate while reducing hiring cost and training cost for new staff. Higher quality service increased customer satisfaction leading patient to repeatedly using hospital service.

Fulfilling customer expectation is the ultimate lean principle in service delivery to make customer satisfied. Standardization was needed in service industry to focus on targeted customer's expectation with high quality service at acceptable price. Value stream mapping able to identify the clear value of each service at the same time the process flow with higher advantages need to be improved and further expand in other field continuously. Hence, this lean process involved employees' empowerment which mean lean is a team effort but not silo's project. Therefore, lean process in service sector need to focus on employee in term of training to increase the empowerment ownership in lean. This shows clearer picture in service sector because service industry has first contact point with customer whether as front-liner

(customer service) or back end support (service provider team) which has different characteristic if compared to manufacturing industry which dealing more with products. So, in service industry, more cost need to focused on manpower to deliver quality services.

### **Relationship between Lean Management, Employee Satisfaction and Customer Satisfaction**

Lean management is a methodology focus on customer perspective to improve quality and added value for customer. Customer satisfaction is able to achieve whenever delivered service is exceeding their expectation. Lean management with utilize tools such as lean principles, 5S, Kaizen concept, removal of non-value activities showed higher quality improvement and customer satisfaction (Womack & Jones, 2005; Falkowski & Kitowski, 2013; Michalska & Szewieczek, 2007; Barraza et al, 2009). Lean in healthcare usually is to target remove of duplicate processes, reduce patient waiting time, reduce length of patient admitted, simplified and standardization of work process, removal of unnecessary recordings and reduce medical errors (Young, 2014). There are few previous studies reported positive relationship between lean management, quality service and finally leading to customer satisfaction. Mohamed (2016) concluded lean implementation reducing patient waiting time for surgery, drug dispenses and diagnostic processes. Few hospitals setting in other countries reported that reduce of patient waiting time, reduce of infection rate, and maximize utilization of bed and resources (DosLeite & Viera, 2015). National Health Service UK (NHSUK) implemented lean on patient facilities, laboratory, and information system setting which reported improvement in quality and customer satisfaction (Young, 2014). Hence, this study derive proposition as below

#### **Proposition 1: Lean management positively related to customer satisfaction**

Meanwhile, Moss et al (2016) found out that health condition and happiness of healthcare provider are positive related with quality of service delivered and patient satisfaction. Besides that, customer experienced with higher satisfaction on delivered services in major hospital when employee with high job satisfaction tend to deliver higher quality of service Peltier & Dahl (2009). Furthermore, customers had positive feedbacks when they are served by a happy employee because the mood from employees are affecting the mood of customer during communication and negative emotional effects leading customer dissatisfaction by putting aside other good experience (Yee et al, 2008). In relation to this, emotional contagion is the linkage between employee satisfaction and customer satisfaction whereby a person has tendency to mimic and synchronized expression, vocalization from another person and this process is occurred unconsciously (Barsade, 2002). From studies carried out by Barsade (2002), a person was join a group member multiple expression and feelings which later all of these speech rates, body language and facial expression were direct transferred to the study subject. So, in a business transaction, employee is a sender to transfer and influence the customer who reacts as a recipient. Hence, this study derive proposition as below

#### **Proposition 2: Employee satisfaction positively related to customer satisfaction**

### **Discussion and Conclusion**

In order for an organization to remain sustainability in market share, products quality, sales service, products continuous development and improvement are important (Gautam & Singh, 2008). Berkowitz (2006) proposed that maximizing customer satisfaction resulted in maximizing profit and market share in healthcare industry. In private healthcare segment,

quality service is a key ingredient to gain customer satisfaction. As from literature review, there were numerous studies have been carried out in other countries about the benefit, effectiveness and frameworks on lean management in service industry. From the findings of prior studies in public health sector in Malaysia, the lean management had positive relationship with customer satisfaction with reduce of patient waiting time. On the other hand, studies in other countries showed direct relationship between employee satisfaction and customer satisfaction in service industry. Thus, this study highlighted two effective ways to established customers satisfaction in healthcare industry which includes lean management and employee satisfaction. In order to support Malaysia's vision, sets of lean management, processes and cultures are necessary for private healthcare to remain competitive and effective globally. Wastes were eliminated from processes and services that provided to end consumers are more value added. Thus, greater employees' satisfaction and established customer's satisfaction can be achieved through higher profit generated.

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**References**

- Aagja, J.A., & Garg, R. (2010). Measuring perceived service quality for public hospitals (PubHosQual) in the Indian context. *International Journal of Pharmaceutical and Healthcare Marketing*, 4(1), 60-83.
- Arasli, H., Ekiz, E.H., & Katircioglu, S.T. (2008). Gearing service quality into public and private hospitals in small islands. *International Journal of Health Care Quality Assurance*, 21(1), 8-23.
- Asma, S., Shahab, A.M, & Sujah, A.M. (2016). Measuring patients' healthcare service quality perceptions, satisfaction, and loyalty in public and private sector hospitals in Pakistan. *International Journal of Quality & Reliability Management*, 33(5), 538 – 557
- Barraza, M.F.S., Smith,T., & Dahlgaard-Park,S.M. (2009). Lean-kaizen public service: an empirical approach in Spanish local governments. *Total Quality Management*. 21(2), 143-167.
- Barraza, M.F.S., Smith,T., & Dahlgaard-Park,S.M. (2012). Lean Service: A literature analysis and classification. *Total Quality Management*. 23(4), 359-380.
- Barsade, S.G., 2002. The ripple effect: emotional contagion and its influence on group behavior. *Administrative Science Quarterly*. 47(4), 644–675.
- Berkowitz, E.N. (2006). *Essentials of Health Care Marketing*. London: Jones and Barlett Publisher International.
- Chen, A.H., Jaafar, S.N., & Md Noor, A.R. (2012). Comparison of Job Satisfaction among Eight Healthcare Professions in Private (Non-Government) Settings. *The Malaysian Journals of Medical Science*, 19(2), 19-26.
- Choong, Y.N., Lau, T.C., Kuek, T.Y., & Lee, E.K. (2012). Job Satisfaction of Malaysian Nurse: A Casual Model. *Journal of Economics and Behavioural Studies*, 4(12), 723-729.
- Chua Sue-Ann.(2010,dec27). Repositioning healthcare as an engine of growth. The edge Malaysia. Retrieved from [http://etp.pemandu.gov.my/upload/ETP\\_TheEdge\\_Pull\\_out.pdf](http://etp.pemandu.gov.my/upload/ETP_TheEdge_Pull_out.pdf)

- Collins, D. (2011). *Business Ethics: How to Design and Manage Ethical Organizations*. New Jersey: Wiley & Sons Inc.
- DosLeite, H.R. & Vieira, G.E. (2015). Lean philosophy and its applications in the service industry: a review of the current knowledge. *Production*, 25(3), 529-541.
- Dun, H.V., Hicks, J.N., & Wilderom, P.M. (2016). Values and behaviors of effective lean managers: Mixed-methods exploratory research. *European Management Journal* (2016), 1-13.
- Falkowski, P. & Kitowski, P. (2013). The 5S methodology as a tool for improving organization of production. *PhD Interdisciplinary Journal*. 127-133.
- Gautam, N., & Singh, N. (2008). Lean product development: Maximizing the customer perceived value through design change (redesign). *Int. J. Production Economics*. 114, 313– 332.
- Grabam, M. (2007). Riverside Medical Center puts Lean in the laboratory. *SME Lean Manufacturing*, 56.
- Grabam, M. (2016). *Lean Hospitals: Improving Quality, Patient safety, and Employee Engagement*. Boca Raton: CRC Press.
- Kadarova, J. , & Demecko, M. (2015). New approaches in Lean Management. *Procedia Economics and Finance*. 39, 11 – 16.
- Kessler, D.P., & Mylod, D. (2011). Does patient satisfaction affect patient loyalty?. *International Journal of Health Care Quality Assurance*, 24(4), 266-273.
- Kondasani, R.K.R. & Panda, R.K. (2015). Customer perceived service quality, satisfaction and loyalty in Indian private healthcare. *International Journal of Health Care Quality Assurance*. 28(5), 452-467.
- Lonial, S. & Raju, P.S. (2014). Impact of service attributes on customer satisfaction and loyalty in a healthcare context. *Leadership in Health Services*. 28(2), 149-166.
- McIntosh, B., Sheppy, B., & Cohen, I. (2013). Illusion or delusion – Lean management in the health sector. *International Journal of Health Care Quality Assurance*. 27(6), 482 – 492.
- Michalska, J. & Szewieczek, D. (2007). The 5S methodology as a tool for improving the organisation. *Journal of Achievements in Materials and Manufacturing Engineering*. 24(2), 211-214.
- Mohamed, M. (2016). Lean Management in Public Sector. Retrieved 1 October, 2016, from <http://www.mpc.gov.my/wp-content/uploads/2016/08/Keynote-2-Lean-Management-In-Public-Sector2-Aug16.pdf>
- Mohd, R., Rugayah, M.A., and Zarul, Z. (2014). Malaysia Job Satisfaction at Workplace: A Case of Doctors in Government Hospital, Kuala Lumpur, Malaysia. *Journal of Administrative Science*, 11(1).
- Moliner, M.A. (2009). Loyalty, perceived value and relationship quality in healthcare services. *Journal of Service Management*, 20(1), 76-97.
- Moss, M. Good, V.S., Gozal, D., Kleinpell, R., & Sessler, C.N. (2016). An Official Critical Care Societies Collaborative Statement – Burnout Syndrome in Critical Care Health-care Professionals. *Chest*, 150 (1), 17-26.
- Nor, K.A., & Wan, N.M. (2016). Linking Service Quality, Patients' Satisfaction and Behavioral Intentions: An investigation on Private Healthcare in Malaysia. *Procedia - Social and Behavioral Sciences* , 224, 141 – 148
- Omar, M.K., & Zakaria, A. (2016). Work-life Balance and Job Satisfaction among Malaysian Healthcare Employees. *Environment Behaviour Proceeding Journal*

- Pantouvakis, A., & Mpogiatzidis, P. (2013). Measuring clinical department efficiency – the impact of clinical leadership job satisfactionAn application to public hospitals. *Benchmarking: An International Journal*, 20 (3), 305 – 321.
- Peltier, J., & Dahl, A. (2009). The Relationship Between Employee Satisfaction and Hospital Patient Experiences. For People Performance Management and Measurement.
- Salisbury, C., Burgess, A., Lattimer, V., Heaney, D., Walker, J., Turnbull, J. & Smith, H. (2005). Developing a standard short questionnaire for the assessment of patient satisfaction with out-of-hours primary care. *Family Practice*, 22(5), 560-569.
- Van, H. I., Verhoeven, A.A.H., & Groenier, K.H. (2006). Job satisfaction among general practitioners: A systematic literature review. *European Journal General Practitioner*, 12(4),174–80.
- Womack, J.P., & Jones, D.T. (2005). Lean consumption. *Harvard Business Review*. 83(3),58-68.
- Yee, W.Y., Yeung, C.L., & Cheng, T.C. (2008). The impact of employee satisfaction on quality and profitability in high-contact service industries. *Journal of Operations Management*. 26, 651–668.
- Yee, W.Y., Yeung, C.L., & Cheng, T.C. (2008). The impact of employee satisfaction on quality and profitability in high-contact service industries. *Journal of Operations Management*. 26, 651–668.
- Young,Y.F. (2014). The Use of 5S in Healthcare Services: A Literature Review. *International Journal of Business and Social Science*. 10(1), 240-248.