Business Improvement and Sustainable Service Quality in Healthcare - A Review and Research Agenda

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Abstract

The Malaysian healthcare system has been expanding due to the increasing demand for the healthcare service in Malaysia. Moreover since the introduction of 'health tourism', this sector has become more competitive in attracting the patients as well as promoting the healthcare services in Malaysia. Due to this development, like elsewhere in the world, the healthcare sector in Malaysia is under pressure to deliver high quality service care. Current processes possibly with inherent inefficiencies and lack of integrated and sustainable approaches to improve services appear to be contributing to bottlenecks, waste and rising costs. Typically, these issues are addressed in isolation and healthcare organisations often fail to maintain the momentum to continually improve performance. This research agenda to develop a new and innovative integrated framework which will enable healthcare organisations to re-design their processes in a holistic manner and embed process improvement techniques to ensure sustainable improvement.

Keywords
Business Improvement; Healthcare; Service Quality

1. Introduction

Malaysia is a one of the developing country that has enjoyed economic growth and undergone major developments programmes since independence in 1957. The Health Plan which has been detailed out in 10th Malaysia Plan 2011-2015 aims to improving the country's healthcare system based on the concept of 1 Care for 1 Malaysia. This concept is to create an effective, efficient, fair and high-tech system of healthcare as well as responsive and can further improve access to various level of appropriate healthcare to all Malaysians (MOH, 2010).10th Malaysia Plan community and spells out a strategy that is geared towards the establishment of a comprehensive healthcare system and public recreational and sports infrastructure to support active lifestyles (MOH, 2010). For the past decade, healthcare tourism has been promoted in Malaysia and currently more than 30 private hospitals are engaged in promoting their services. As a result, Malaysia receives a quite high number of international patients which majorly come from ASEAN countries and about 10 to 15% from developed countries and Middle East. As such Malaysian healthcare tourism has generated revenue of more than RM350 million in 2008 (MGCC, 2011).

Recent changes in the competitive environment have forced Malaysian healthcare industry to formulate new approach and strategy. One of the approaches to achieve this aim is to review healthcare delivery system which includes process improvement design. The process improvement in healthcare assures that the critical systems in an organization are operating at their optimum. Furthermore it can enhance the effectiveness of the systems across departments while maximizing profits and ultimately improving the quality of the patient's experience and care.

Process improvement in healthcare is imperative in today's rapidly changing environment. In U.S there is growing issues regarding its delivery system which is claimed as woefully inefficient and needs to be radically designed (Green, 2012). This situation is not much better in Malaysian healthcare industry as this sector has tremendous pressure to deliver high quality service care.

The healthcare system in Malaysia has been characterized by a strong public-sector and private healthcare components. The number of private hospitals has been increasing since in the middle of 1990s due to general economic prosperity. Sohail (2003) claimed that one of the reasons for this development might be reflected by the perception that publicly funded hospitals are still not able to provide high quality of healthcare service compared to private hospitals. Despite this, a research has shown that the overall healthcare organisations in Malaysia need to increase efficiency in providing service in a highly competitive industry not only in private

sector but also in public sector. This industry is faced with challenges and opportunities from a competitive operating environment, including increasing expectations on the quality of delivery system (Shazali et al., 2013). It is argued that current processes in Malaysia healthcare system contain inherent inefficiencies and lack of integrated and sustainable approaches to improve service appear to be contributing to bottlenecks, waste and rising costs. Typically these issues are addressed in isolation and healthcare organisations often fail to maintain the momentum to continually improve performance.

2. Literature Review

In today's rapidly changing business environment hospitals are faced with the imperative to reduce costs and increase capacities while delivering increasingly better patient care. Not only that, the increasing use of information technology to capture financial, operational, and clinical data and to coordinate care across time and different venues, there is a growing demand for operations analysts to examine processes of care and provide much-needed insights on how to better utilize resources to improve outcomes while reducing costs (Green, 2012). Healthcare costs have always been a driving force in policy and management, but quality has become equally important in driving decisions, particularly since emerging payment systems include metrics on clinical and operational performance (Green, 2012).

In recognition of these challenges, business process improvement has been developed to meet the strategic needs of this healthcare sector. Adopting a process improvement program that incorporates today's best practices such as lean, six sigma, project mentoring, value stream analysis facilitation and rapid improvement workshop facilitation is essential to meet financial targets and performance goals which can be achieved simultaneously. Generally, process improvement can be looked at two kinds of problems which at two level; macro and micro level (Green, 2012).

On the macro level, there are critical policy issues involving the supply of major healthcare resources such as hospitals, beds, emergency rooms, physicians, nurses and major imaging equipment. At the micro level, the decisions are about the specifics of the timing, location, and nature of care for a specific patient and set of operational circumstances. In between, there are issues of process design, organization, and resource allocation.

According to Green (2012) there are two opportunities for improving care. These falls into two categories: medical decision making and operational decision making. Medical decision making relates to those decisions that directly affect a patient's clinical outcomes. For examples, diagnostic and evaluative protocols, treatment options, and care regimens. In contrast operational decision making includes those decisions that determine how organization makes itself available to serve patients, such as resource and capacity allocation as well as the scheduling of patients, facilities, and providers.

Clinical process improvement does not concentrate simply on patient care, but rather examines the entire process from scheduling through to discharge. Finding the few critical processes on which to concentrate change management efforts can generate up to 50% improvement in those processes, and tremendously impact patient and employee satisfaction as well as the bottom line of an organization. Hence it is equally important for Malaysian Healthcare industry to review its business process for a sustainable service quality and performance improvements and help the country to meet its National plan as indicated in 10th Malaysia Plan 2011- 2015.
There are a few suggested ways for process improvement. The basic process for process improvement includes flowcharting the systems chosen for the improvement effort, identifying problems in the system, and then beginning a redesign process that eliminates the rubs and dramatically improves the performance of the system.

According to Institute for Healthcare Improvement, The Plan-Do-Study-Act (PDSA) cycle is employed to test changes in process improvement. The PDSA cycle guides the test of a change to determine if the change is an improvement. The suggested framework to guide improvement work based on PDSA cycle includes Forming the Team, Setting Aims, Establishing Measures, Selecting Changes, Testing Changes, Implementing Changes and Spreading Changes.

A study in business process re-engineering of a surgical ward in a hospital by Bertolini et al (2011) indicated that it was possible to identify a number of areas for improvement: number of operating sessions, preparation of the operating rooms for each operation, availability of specific surgical instruments. Moreover, the discrete event simulation approach led to an understanding of the most efficient management choices.

Another approach for process improvement is lean implementation. Lean process improvement refers to principles of lean manufacturing which is based on continuous finding and removal of the wastes (Erfan, 2010).

The focus is on eliminating delay, repeated encounters, errors, and inappropriate procedures (Young et al. (2004). This involves streamlining the flow of activities from initial conception to final delivery of a product or service. Companies identify which activities create waste instead of value.

Lean thinking in healthcare can be applied through the implementation of Six Sigma (SS) practices. Khaidir et al. (2010) argued that SS is practical concept in enhancing healthcare processes. Besides that, the SS is suitable in healthcare nature sector because the healthcare nature of zero tolerance for medical error in processes. Previous study in SS has found that the SS implementation has a direct and strong relationship with organisational performance hence has proved that process improvement is able to increase the overall performance of the organisation. Apart from that Lean thinking also exploits Value Stream Mapping (VSM) tools to expose the waste and identify a proposed plan for improvement (Erfan, 2010). VSM analyzes and designs the flow of materials and information required to bring a product or service to a consumer.

Erfan (2010) attempted to apply the principles of lean manufacturing in the service sector in Libya with the purpose of eliminating wastes and increasing capacity. Using VSM tool, the results showed significant improvements in the overall performance of the system, which allowed to be more productive, flexible, smooth with high quality service.

3. Strategies For Implementation

Figure 1 shows strategies implementation for this research. In this stage, it is start with doing a literature review and preliminary study to look into research context, current issues, challenges and opportunities in healthcare. Questionnaire will be distributed to healthcare to investigate materials in healthcare current business process and practices.

Next is process mapping and data collection. Data will be collected by interview and document review. Then, the data will be analysed to identify bottlenecks and waste.

The last phase is building the integrated framework by synthesising the best practices and tools. This framework will embody a range of well proven process improvement techniques such as lean/six sigma and powerful operations management tools.

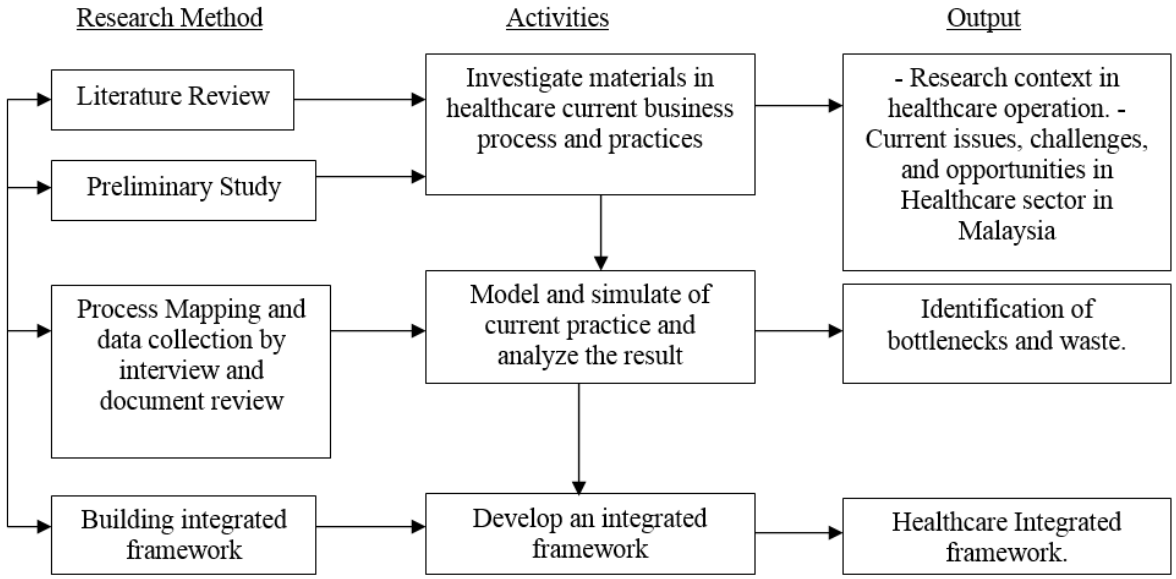

Figure 1

4. Conclusion

As summary, the research will synthesise existing best practices and tools to create a new and innovative integrated framework of process improvement in healthcare organisations. This involves, literature review on

challenges and opportunities in healthcare sector in Malaysia, process mapping, interview and building the integrated framework by synthesising the best practices and tools. This work will further advance international research in the area of improving healthcare operations and contribute to new knowledge by developing a new and innovative integrated framework to achieve sustainable process improvements in healthcare. Therefore this research agenda to investigate these issues from the perspective of business process improvement which is hoped could help the Malaysian Healthcare organisations either in public or private sector to better improve their delivery system, reducing costs as well as enhancing their overall performance by increasing the satisfaction level of the patients or clients.

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Biography

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