

Project Title

Innovation in TTSH Procurement Procedure to meet Management Governance and Joint Commission International (JCI) Audit

Project Lead and Members

- Paul Yong, CFO, Finance Division, Financial Accounting Planning
- Terence Yeo, Assistant Director, Finance Division, Materials Management Department
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Organisation(s) Involved

Tan Tock Seng Hospital

Project Period

Start date: Aug 2014

Project Category

Process Improvement, Process Redesign, Quality Improvement

Keywords

Finance, Procurement, Process Redesign, Quality Improvement, Process Improvement, Safe Care, Medical Supplies, Management Governance, Supply Chain Management, Lean Methodology, Inventory Control, Bulk Purchase, Reputable Suppliers, Cost Reduction, Lead Time Reduction, Tan Tock Seng Hospital, Materials Management, Joint Commission International Audit

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INNOVATIONS IN HOSPITAL MANAGEMENT GOVERNANCE

(Has to do with the basic functions of management, setting strategic directions and how management assures itself that it has control and feedback and practices good governance).

This award is for the hospital that implemented the most effective management innovations. The innovations can be in one or more areas of governance or implementing management policies, in setting goals and organizing to meet them, improvements in how the hospital plans its services, manages its finances, motivates its staff and has developed an effective feedback /control and management review processes. The entry needs to demonstrate measurable results. Is there “visible” leadership to create the right mindset and culture for a better patient experience?

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Project Date:

August 2014

Department Name:

1. Financial Accounting / Planning
2. Materials Management Department

Key Staff Involved in the Project:

1. Paul Yong, Chief Financial Officer, Finance Division, Financial Accounting / Planning
 2. Terence Yeo, Assistant Director, Finance Division, Materials Management Department
 3. Garry Tan, Assistant Manager, Finance Division, Materials Management Department
 4. Ng Wai Chii, Executive, Finance Division, Materials Management Department
 5. Eileen Tan, Executive, Finance Division, Materials Management Department
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1. Please give some background to the project or program including how it originated. Give details of the extent to which the project improves the efficiency or effectiveness of overall service. Outline any specific goals or targets you had in mind prior to the project being put together. **MAX 350 WORDS.**

In September 2014, Tan Tock Seng Hospital (TTSH) had obtained its triennial Joint-Commission International re-accreditation for the 3rd time since 2005. This time the re-accreditation was much spectacular and impressive with an overall score of 99.8%.

The overall score was made even more impressive with higher standards set in 2013 by JCI audit, a year before TTSH's re-accreditation in 2014. In particular, on the Governance, Leadership, and Direction (GLD) for Resource Decision (JCI Audit GLD no. 7) for the Hospital. In all, there were 19 GLD standards. The purpose is to raise the standards expected from the hospital and the leadership for the patient safety and well-being. Of which, one of these standards was; to emphasize the need to protect patients and staff from contaminated, fake, and diverted drugs, medical technology, and supplies.

This submission illustrates how TTSH MMD responded in meeting the standards and needs timely to protect patients and staff from the above.

The specific goals or targets are;

- 1 The Materials Management Department, Directives from the Chairman of Medical Board (CMB), and the Senior Management of Tan Tock Seng Hospital (TTSH), was commissioned to administer the above standards.
- 2 Full eradication of contaminated, fake, and diverted drugs, medical technology and clinical supplies through clear and specific Governance, Leadership and Direction by;
 - Identifying products and supplies which are critical to the hospital.
 - Establishing sourcing methodology/process for genuine and substitutable products.
 - Sourcing for reputable medical suppliers.
 - Inventory control for all medical stock items in hospital store.
 - Establishing long term contracts with reputable suppliers which leads to stabilised supplies and non-stock out situation.

These initiatives eventually lead to significant improvements in cost reduction and better governance. The former, through application of lean methodology also mitigated the risk of unpredictability in the hospital's value and supply chain. The latter, creates awareness of accountability for the leadership - to the public and relevant governing bodies through dispersing evidence-based directions and control so as to address the risk on hospital supplies affecting the patients and staffs.

2. Please give details of what costs were reduced and how much and what positive or negative effects if any there was. Describe how the project was beneficial from the patient's perspective and experience, if any and of the savings were passed on to the patient? Are the savings sustainable or were they one time? **MAX 250 WORDS.**

Contracts for Bulk Purchase were established, reducing the cost of goods. In FY2014, TTSH had saved \$1.6 million in negotiated savings and established 90% (or about 2000 out of 2300+ line items of consumable products) with contracts between accredited* vendors and with TTSH. This is an improvement over the past year for savings and contract management.

Other cost or risks that were avoided or averted are;

- a) Contaminated or Expired Medical Supplies administered on Patients Reported for past 3 Years: ZERO.

As a result of meticulous, disciplined and consistent checks to critical medical supplies from source to the hospital's medical supplies storage facility, the risk to patients receiving contaminated or expired supplies through consistent logistics and storage practices are totally eliminated.

- b) Reported fake products used by the hospital for past 3 years: ZERO

As a result of sound hospital governance and leadership, clear direction to source and purchase from accredited, certified and reputable suppliers, fake products will never be consumed by TTSH's patients.

- c) All critical (levels 1 and 2) medical supplies reported diverted or non-availability or stock-out at hospital Store for past 3 years: ZERO

*** Accredited by Singapore Health Science Authority, US FDA, EU standards.*

3. Please describe IF and how the improvements in management was also beneficial from the patient's perspective and experience, and how it improved patient care, patient safety or service. Preferably please present quantifiable information such as "before and after" measurements if any. **MAX 200 WORDS.**

Reduction of long lead time

The list consists of ad hoc medical items that have consistent high volume usage and long lead time. With these identified items, we are able to establish a bulk contract order. The lead time was reduced from as long as 26 weeks to within 2 weeks, without increasing storage space in the hospital. A bulk commitment also allows overall price reduction and the savings are then passed to patients.

Reduction in overall cost

A committed bulk contract for the critical medical items allows negotiation for better pricing, resulting in a direct cost savings of \$2.3 million. Furthermore, the cost for emergency delivery can be avoided.

Reduction in expired items

Instead of requesting and stocking up items to offset the lead time (some as long as 26 weeks of stocks), the stock PAR is reduced to 2 weeks' worth of stock, significantly reducing incidence of expired items.

Items procured were of better quality and there is faster supply arrival to meet patients' needs. This is evident from our average patient discharge rate in 2014, which reduced from 5 days to 3 days of hospitalisation stay.

Word Count: 189 / 200

4. Explain to what extent and why the improvements are sustainable. **MAX 200 WORDS.**

The savings are sustainable as demands for higher quality and improved drugs, medical supplies and devices, are projected to increase by an average of 3% each year (based on hospital's historical demands). It therefore provide our vendors with committed projected orders to run production effectively from contracts established with well-defined Service-Level Agreement (SLA). This ensure our patients and staff are well protected from contaminated, fake, and diverted drugs, medical technology, and supplies.

The Joint-Commission International also audits the hospital every 3-years for re-accreditation. It ensures that we are held to sustain the high standard that we had shown.

From the stringent and meticulous safety requirement in sourcing and eventual approval by our local regulatory bodies such as; the Health Science Authority, including external bodies such as FDA and CE approved, medical supplies delivered and administered by our clinicians to our patients are 100% safe. With the engagement of reputable suppliers, the assurance of seamless stock availability, as well as stringent monitoring for non-expired stocks by our staff, the clinicians are relieved of such administrative duties to focus on providing excellent patient care.

Word Count: 182 / 200

5. Please give some background to the project team that originated, studied and developed the project or program. **MAX 200 WORDS.**

The project team was formed in January 2014, led by the senior leadership of the hospital and the Materials Management Department key representatives. They were formed to find causes and effects with systematic innovation in mind for further improvising procurement procedural flow to meet hospital's increasing healthcare demands.

Hospital management staff were briefed and updated on this programme of innovation in procurement procedure. Other medical institutions came to TTSH for their educational learning of such improved and innovated IT system. A few overseas healthcare institutions and bodies from Taiwan, Hong Kong, Thailand, Myanmar and China also came to visit TTSH to learn about this programme of innovation in procurement procedure.

Word Count: 110 / 200

6. Please add any other items that will convince the judges that your hospital is worthy of being given the "most improved" hospital award. **MAX 300 WORDS.**

TTSH, with almost 172 years of healthcare service providing and experience, has improved and gained much of medical and clinical knowledge of managing and containing diseases' outbreaks of SARS, H1N1 and Influenza A, co-ordinating and sharing much with WHO (World Health Organisation) on preparation of recent outbreak, like Ebola infection and MERs-COV.

TTSH has altogether about 1,500 beds coming from some 50 inpatient wards today, as compared to only 800 beds in 1999. More than 10 extra new outpatient specialist clinics were added and opened to cater to latest public

needs. It has been audited and re-accredited by international healthcare standard body, JCI (Joint Commission International) for the 3rd time.

Internal healthcare logistics supports, medical, clinical items, and equipment were procured with better quality to facilitate the hospital's medical and clinical professional teams and better serve patients with innovative cures. This was achieved by the improved hospital's healthcare supply chain management of innovated procurement procedure.

One of the recent JCI audit team surveyor/administrator surveyor, Dr. Ozlem Yildirim (PhD, MsEM, BscIE) complimented;

"...this Supply Chain Management chapter in this hospital which we auditors have just completed audit, is one of most detailed, descriptive and profound, with excellent positive results and findings so far with my JCI audits experience since I took up audit role few years ago...."

Another JCI audit surveyor (leader of the audit team) Dr Enrico Baldantoni (MD, physician) said as quoted;

"...we have unanimously pronounced a 9/10 excellent result this time of audit to your hospital as we are fully satisfied with your huge improvements as compared to your past 2 times of JCI audits..."

TTSH has improved continually as shown by the patients' complimentary feedbacks as well as 3 times JCI audits results.

Words: 286 / 300
