

## **Project Title**

Achieving Service Excellence through LEAN at Clinic 2B

## **Project Lead and Members**

Project lead: Karen Rajoo

Project members: Malarvele P, Emiline Aberine Samonte, Mary Grace Roshini,  
Serene Kua

## **Organisation(s) Involved**

Tan Tock Seng Hospital

## **Project Period**

Start date: Feb 2012

## **Aims**

The aim of the service improvement project is to enhance patient satisfaction in a multi-disciplinary specialist clinic through adoption of Lean methodologies into daily work and clinical procedures.

## **Additional Information**

Service Award Received by Clinic 2B

- TTSH PEARL - Service Excellence Team Award FY2011 4<sup>th</sup> Quarter
- TTSH The Exceptional Stars Award 2013 – The Exemplary Stars Award

## **Project Category**

Process Improvement, Productivity, Quality Improvement

## **Keywords**

Tan Tock Seng Hospital, Patient-centric Care, Multi-disciplinary Specialist Services, Patient Satisfaction Score, , Lean Methodology, Wait Time, Job Breakdown Sheet (JBS),

Staff Training, Root Cause Analysis, Plan Development Service Action (PDSA), Coordinated Care, Teamwork Culture, Service Mindset, Service Excellence, , Standard Workflows, Reduce Resource Wastages, Process Improvement, Productivity, Quality Improvement

**Name and Email of Project Contact Person(s)**

Name: Karen Rajoo

Email: Karen\_Rajoo@ttsh.com.sg

# ENTRY FORM FOR CUSTOMER SERVICE CATEGORY

A customer service project that responded well to the needs of its clientele, drew praise from them, and positively projected the hospital as a quality service provider. The judges favor entries that also reduced costs, and did not require major capital expenditure. More weight is given to projects that are innovative (in relation to where the hospital is located). Is it a meaningful improvement of its service considering the environment in which it operates?

## INSTRUCTIONS

- Please fill out all the sections below and abide strictly by the word count. Words exceeding the maximum word count will be cut off automatically/truncated.
- IMPORTANT: It is necessary that the CEO certifies that all information you provide is true and correct by signing the form indicated in the last page.
- By submitting an entry, you agree that HMA will share relevant aspects of the Entry submitted on the HMA or related Resource Center website.

## Background Information

Project Title                      **Achieving Service Excellence through LEAN –  
An Improvement Project for Multi-Disciplinary  
Surgical Specialist Clinic 2B, Tan Tock Seng Hospital**

Date Project Started              **February 2012**

### Key staff involved in the project

- |                     |  |
|---------------------|--|
| 1. Name             | Karen Rajoo                                    |
| Department/Function | Senior Clinic Manager Clinic 2B Medical Centre |
| 2. Name             | Malarvele P                                    |
| Department/Function | PSA Supervisor Clinic 2B                       |
| 3. Name             | Emiline Aberine Samonte                        |
| Department/Function | Senior Staff Nurse Clinic 2B                   |
| 4. Name             | Mary Grace Roshini                             |
| Department/Function | Senior Staff Nurse Clinic 2B                   |
| 5. Name             | Serene Kua                                     |
| Department/Function | Senior Patient Service Associate               |

**PLEASE ANSWER THE FOLLOWING QUESTIONS USING THE MAXIMUM WORD ALLOCATIONS INDICATED**

1. Please give some background to the project or program including how it originated. Give details of how the project responded to the needs of patients and drew praise from them. Outline any specific goals or targets you had in mind prior to the project being put together. **MAX 350 WORDS.**

**Problem**

Clinic 2B is a new clinic providing multi-disciplinary specialist services for non-subsidised patients. Its first Patient Satisfaction Score (PSS)<sup>1</sup> was 70% in 2011<sup>2</sup>, three months after the clinic was operational. The score was below the TTSH key performance indicator of 80%.

	Overall Satisfaction (%)	Overall Experience (%)
PEARL		
Clinic 2B	70.0	77.5

Patients' service expectations were not met as they expected effective point-to-point coordinated care and shorter waiting time in the non-subsidised Clinic. This problem is elevated by the fact that the Clinic staff were inexperienced.

The new clinic face many other challenges include:

- Different workflows developed for different surgical disciplines
- Extended offering of new services requiring new processes
- New team of frontline staff - 50% having less than 1 year of experience
- Timely communication of waiting time for blood tests and consultation
- Management of new registration system and process

**Aim**

The aim of the service improvement project is to enhance patient satisfaction in a multi-disciplinary specialist clinic through adoption of Lean methodologies<sup>3</sup> into daily work and clinical procedures.

1. Improve productivity by implementing systematic work processes and reducing resource wastages.
2. Create regular platforms to facilitate learning and celebrate successes.
3. Enhance overall patient satisfaction with service improvement initiatives.
4. Build a self-sustaining service improvement and teamwork culture.

**Project Targets**

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<sup>1</sup> Patient Satisfaction Surveys are conducted in the hospital and used as a measure of the institutions' customer service rendered to patients. Yearly, Singapore' Ministry of Health (MOH) conducts and reports on the results of the same survey across all the public and restructured hospitals.

<sup>2</sup> The results were presented in January 2012.

<sup>3</sup> Tan Tock Seng Hospital's (TTSH's) Lean empowers all staff to proactively make continual improvement to provide faster, better, cheaper and safer care to our patients.

1. A structured orientation guide for all new clinic staff
2. Train 100% frontline and nursing staff to be equipped with product knowledge and work process information at every service touch point.
3. Train 100% staff to have service mindset.
4. Achieve at least 80% PSS
5. Achieve a ratio of at least 10 Compliments: 1 Complaint ratio
6. Improved wait time for doctor's consultation

Word count: **348** / 350

2. Please describe how the project was 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. Did it meet and exceed expectations? **MAX 200 WORDS.**

### **Standard Work Processes**

Clinic 2B developed standard workflows and job instructions to guide work processes. Standard scripts for all scenarios were formulated.





Care coordinators coached to proactively communicate to patients should they wait for more than 30 minutes.

### **Communication Platforms**

The Clinic Manager conducts twice daily roll calls to facilitate service learning. Best practices were shared and service successes were celebrated.

### **Staff Training**

To enhance the competency and knowledge level of staff, they were sent for training to review the current work processes. **Job Breakdown Sheet (JBS)** below used by in codifying new processes.

**STANDARD WORK**

Operation:	Registration for planned first visit (FV)	SW No.: REG 1.0
Equipment; Parts; Tools; Materials	SAP system, EOMS system, Q printing machine, bar code scanner, monitor	SW Rev: 1
Related Documents; Forms	I/C, Referral letter, Assessment form, MEC charge form	Effective: 14/08/2012 DOMMY

#	WORK SEQUENCE	STANDARD <small>(Specifications, Quality, Safety)</small>
1	Upon patient's arrival to the clinic.	1. Verify visit type (FV) 2. Scan Patient identity card at SRK 3. Short queue ticket issue to patient 4. Direct patient to counter
2	Register patient.	1. Ask for patient's I/C and referral letter (if applicable) 2. Verify patient personal particular and NOK 3. Change visit type in SAP system from "Planned" to "Actual" and save it
3	Patient Assessment	1. Verify patient current condition and pain score 2. Inform nurse to assess patient if in pain (if applicable)

#	WORK SEQUENCE	STANDARD <small>(Specifications, Quality, Safety)</small>
4	Inform of Consultation charges	1. Refer to consultation chargers chart
5	Print Itinerary.	1. Issue Q no. and explain to patient on his/ her Itinerary.
6	Patient Pearl Folder	1. Arrange completed <ul style="list-style-type: none"> <li>- patient assessment form,</li> <li>- MEC checklist,</li> <li>- Pearl appointment card</li> <li>- referral letter (if applicable)</li> </ul> into pearl folder.

Created by: SPSA Serene Kua, SPSA Ang Yuan Lin SPSA Siti Raudhah, PSA Jolyn Chung, SPSA Vanessa Koh Department: Clinic 2B	Approved by: CM Karen Rajoo Validated with: Supervisor Mala
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Both Patient Service Associates (PSAs) and Nurses are trained to multi-task and perform different roles. PSAs are trained in Room Assisting, Financial Counselling and Registration. Nurses are trained in Room Assisting, Financial Counseling and Specialised Clinical Skills.

## Outcomes

Patient satisfaction increased by 20% from 70% to 90% in 2012 Quarter 1.

	Overall Satisfaction (%)		Overall Experience (%)	
	2012 Q1	2011 Q3	2012 Q1	2011 Q3
<b>PEARL</b>				
<b>Clinic 2B</b>	<b>90.7</b>	<b>70.0</b>	<b>83.7</b>	<b>77.5</b>

Patient Satisfaction is consistently above Hospital benchmark of 80%.

Clinic 2B	Patient Satisfaction Score
2011 Q3	70.0%
2012 Q1	90.7%
2012 Q4	82.9%
2013 Q1	84%

Patient compliments exceeded target of 10 Compliments : 1 Complaint.

No. of Compliments vs Complaints Target - 10 Compliments : 1 Complaint			
	No. of Compliments	No. of Complaints	Compliments / Complaints ratio
Dec 2011	92	18	5.1 : 1
Dec 2012	17	1	17 : 1

Service Excellence Team Award for the Quarter (Jan to Mar 2012) - Highest patient compliments at 163 compliments



TTSH Exemplary Stars Award 2012 - Highest patient compliments at 465 compliments



Wait time for consultation improved.

Oct - Dec (Q4)	50th percentile		95th percentile	
	FY11 (mins)	FY12 (mins)	FY11 (mins)	FY12 (mins)
Clinic 2B	15	2	73	26

Word count: **200** / 200

3. Please tell us how you have engaged your whole team in a culture of customer service excellence and how the project positively projected the hospital as a quality service provider. **MAX 200 WORDS.**

### Team Observations

Information was gathered by using naturalistic observations. Observations were carried out by staff who were assigned and deployed to different specialist clinics. These observations were then shared during the daily team debrief.

### Sharing Platforms

Debrief session was conducted at the end of the day to discuss the different work processes observed. Varied work processes that cause confusion were discussed.

A detailed **Root Cause Analysis** was done to evaluate the problems and found that the common issue was due to lack of standard workflows.



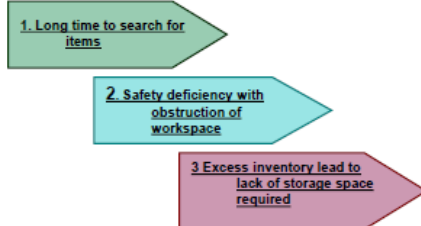
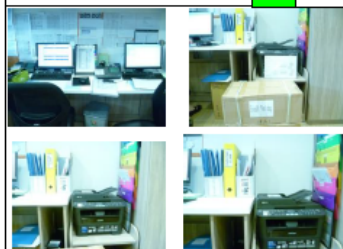
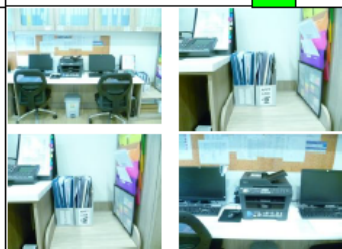
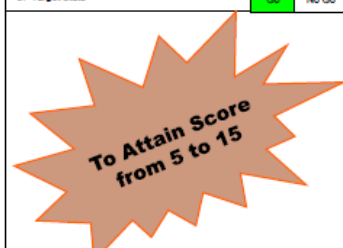
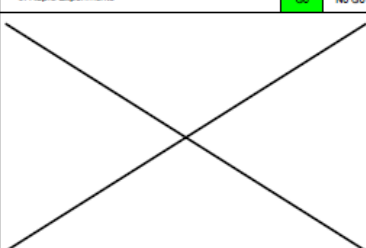
Tan Tock Seng HOSPITAL		Root Cause Analysis Appointment Date Not Given in Clinic (2B)	
Date of Complaint: (08/03/2012)		Name of Staff(s) Involved In Complaint:	
S/N	What Happened?	What Had Gone Wrong?	What Are The Recommended Solutions?
1	<ul style="list-style-type: none"> <li>Patient walked in to Clinic 2B requesting a follow-up appointment with a Vascular Doctor and questioning the clinic how come there is no follow-up appointment given from the last visit (31.01.2012).</li> </ul>	<ul style="list-style-type: none"> <li>On 31.01.2012, Mdm (S I) came to Clinic 2B to see Dr After the consultation, ask the patient to take a seat outside while I make a follow-up appointment but forget to save the appointment in the system.</li> </ul>	<ul style="list-style-type: none"> <li>Double confirm and double check patients appointment against the case notes and SAP system.</li> </ul>
2	<ul style="list-style-type: none"> <li>Room Assistant :</li> <li>Billing PSA :</li> <li>Angie followed up by tracing the case notes to confirm with the notes the TCU.</li> </ul>	<ul style="list-style-type: none"> <li>Billing PSA should have double check the card and SAP system if the appointment have been saved.</li> </ul>	<ul style="list-style-type: none"> <li>Room Assistant to write the date of follow-up appointment in the appointment list. At the end of the day, double check with the list.</li> </ul>

### Strategy for Change

The major change was in standardising critical workflows which in turn smoothens service delivery and efficiency e.g. standard script for rescheduling of patient's appointment. A guidebook/manual on clinic work process was developed for daily reinforcement of work processes.



Clinic 2B reviewed and standardised 23 work processes for administrative and nursing practices. In addition, 8 Daily Improvement Board issues were submitted and two workflow projects (example enclosed) were completed.

		<b>Title :</b> Clinic 2B Room 4 Appointment Line <b>Process Owner:</b> Clinic 2B <b>Team Members :</b> Malavele Yuan Lin, Fathana, Cindy		<b>Facilitator:</b> Malavele <b>Sponsor:</b> Karen Rajoo		Start Date: 08.02.2012 Current Date: 14.02.2012 End Date: 14.02.2012																							
<b>1. Reason for Action</b> <span style="float: right;">Go No Go</span>		<b>4. Gap Analysis</b> <span style="float: right;">Go No Go</span>		<b>7. Completion Plan</b> <span style="float: right;">Go No Go</span>																									
<b>Problem Statement</b> • Disorganized storage of forms, stationeries & equipment • Unequal Distribution of workload • Safety Deficiency • Excess inventory leading to unnecessary usage of storage space  <b>Objective</b> • Better – Reorganize for better utilization of resources • Faster – Reduction of time in retrieving items • Safer – Elimination of hazards and errors in work area. • Cheaper – Eliminate excess inventory  <b>Scope &amp; Boundary</b> Clinic 2B Room 4 Appointment Line				<table border="1"> <thead> <tr> <th>Action</th> <th>Owner</th> <th>Due</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Remove Unwanted Items</td> <td>6B Team</td> <td>04.02.2012</td> <td></td> </tr> <tr> <td>Relocate of Fax machine 7 Boxes</td> <td>6B Team</td> <td>04.02.2012</td> <td></td> </tr> <tr> <td>Set up daily assignment board</td> <td>6B Team</td> <td>04.02.2012</td> <td></td> </tr> <tr> <td>Create JBS files</td> <td>6B Team</td> <td>04.02.2012</td> <td></td> </tr> </tbody> </table>						Action	Owner	Due	Status	Remove Unwanted Items	6B Team	04.02.2012		Relocate of Fax machine 7 Boxes	6B Team	04.02.2012		Set up daily assignment board	6B Team	04.02.2012		Create JBS files	6B Team	04.02.2012	
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<b>2. Initial State</b> 6B scorecard : 6 <span style="float: right;">Go No Go</span>		<b>5. Solution Approach</b> <span style="float: right;">Go No Go</span>		<b>8. Confirmed State:</b> 6B scorecard: 16 <span style="float: right;">Go No Go</span>																									
		<b>SAFETY</b> • Remove unwanted items away to prevent staff from injury <b>ADAPT</b> • Discard unwanted items – E.g. files, books and boxes <b>STRAIGHTEN</b> • Relocate the Fax machine to a reachable and even distribution position • Arrange files in according to frequency of usage and flow <b>SHINE</b> • Remove unwanted notes from the notice board. • Putting up doctor's specialty and price for consult (Information needed for appointment line staff) <b>STANDARDISE</b> • Establish Job method and Job Instruction for appointment line • Files were created for to keep track of the Fax received and appointment should be given by 5.30pm of the day. <b>SUSTAIN</b> • Schedule daily and daily check by Supervisor and Clinic In-charge																											
<b>3. Target State</b> <span style="float: right;">Go No Go</span>		<b>6. Rapid Experiments</b> <span style="float: right;">Go No Go</span>		<b>9. Insights</b> <span style="float: right;">Go No Go</span>																									
				<b>Actions</b>		<b>What are the fundamental lessons of the event and the improvement cycle?</b>																							
						<b>What went well?</b> 1. Manage to clear unnecessary items 2. Co-operative and supportive team members 3. Built team spirit and ownership		<b>What did not go well?</b> 1. Shortage of manpower for arranging items on Saturdays																					
						<b>What helped?</b> 1. Supportive from the facilitator and team members		<b>What hindered?</b> 1. Space allowance																					

Clinic 2B constantly reviewed and revised its processes and services through knowledge obtained from Advanced Lean training programme and Service Training programme. Plan Development Service Action (PDSA) was adopted to continuously improve the care coordination of multi-disciplinary services within the clinic.

Word count: 198 / 200

4. Please explain if the project utilized capital and how much was utilized. Or in fact did it also reduce costs? To what extent was the project prevention oriented, and how well it will reduce or eliminate the service defect, or reduce waste, or improve communication. Will the benefits be long lasting? **MAX 150 WORDS.**

The project did not utilise huge capital investments as service training was facilitated in-house by the clinic or by TTSH's Human Resource Development department. We adopted the model of "Train-the-trainer" and develop network of champions. These individuals would work with the line-trainers to drive

Lean implementation. The champions facilitated the spread and standardisation of best practices.

By building a service culture of improvement, there will be cost savings as less time is spent on resolving patient complaints and providing service recovery.

### **Sustaining Good Results**

To sustain positive service results, Clinic 2B is in partnership with the Human Resource Department to embark on a pilot training programme to bring service levels beyond the current level. The aim of this programme is to inculcate service mindset in all staff, solicit commitment and ideas to improve service level within the Clinic. From here, Clinic staff will be assigned to service improvement projects.

Word count: **149** / 150

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

A workgroup comprising of managerial and frontline staff from Clinic 2B was established to develop standardised and systematic work process, improved the work environment and service training and development for staff.

New staff were recruited and deployed to different specialist clinics to obtain practical experience few months before Clinic 2B commences its set-up process and officially started the running of this clinic on 16 August 2011

Staffing ratio in Clinic 2B comprised of 10% existing staff and 90% new. It is essential to develop a standardised and systematic work process to guide new staff into this period of transition. Implementing a standardised work process reduce incidence of errors.

Standardisation and periodic reviewing of work processes helps to improve efficiency and effectiveness of patient service delivery, it is vital for staff to change their perception towards changes and important to maintain an open-mind and receive constructive feedback positively. **Quality improvement** is a continuous learning process.

Word count: **154** / 200

6. Please give any other information, including third party testimonial regarding your project which you think would help convince the judges that this project (or program) should win this category. **MAX 200 WORDS.**

Patient testimonials are the most truthful insight on Clinic 2B's performance in delivering patient-centric service.

***"Most of the staff are commendable in their efforts in their discharge of duties. I am so proud of your hospital. I am very impressed with the quality and standard of staff performance as compared to some private hospital. Thanks"***

Patient - Madam Neo, May 2012

***"...must commend all the staff who attended to me – Dr Felicia Hong, nurses especially SN Grace and MRI Juan and counter staff. Everyone was pleasant, helpful, courteous and professional."*** Patient – Mr Quah, July 2012

***"As a new hire, I am confident and competent in executing my duties with the standardisation in the processes and workflow. I also feel that the initiatives are from ground up that empowers and motivates me to excel in my customer service."***

Staff of Clinic 2B - Senior PSA NursyahidahBte Mohd Shokri

***"I am heartened by the continuous improvement mindset of the team. Many times, I see the whole team attending service training on weekends. I would like to thank the team for their commitment to deliver better care and service to our patients."***

Associate Professor Chia Sing Joo, Medical Director, PEARL Services

Word count: **198** / 200



## Commit To Guidelines & Standard Processes

By Tan Ghim Meng, Kaizen Office

### PEARL CLINIC 2B

#### NECESSITY – THE MOTHER OF ALL INVENTIONS

It was an idea created out of necessity, according to Karen Rajoo, Clinic 2B Manager. She is of course referring to the Standard Work (document), created by her team, for operating the examination couch. Karen further explained, **"While our hospital was in the midst of renovating the existing clinics and building new clinics according to the Medical Centre Masterplan, it also acquired the new examination couches for the consultation rooms. My team for the new Clinic 2B consisted of many new staff. In fact, only 3 of the 20 Patient Services Associates (PSAs) in my clinic were experienced at that time... and all of us were unfamiliar with the new couch."**

#### DEFINING THE STANDARD

Determined to overcome this challenge, the Clinic 2B team got the vendor to demonstrate how to operate the couch just before the clinic commenced operations post-renovation. Based on this demonstration, Staff Nurse (SN) Emiline Aberine Samonte wrote the clinic's Standard Work for operating the couch. The content was then taught to every staff in the team in a systematic way, particularly those PSAs who would be assisting the doctors in the consultation rooms.

When the clinic had to present this effort in February 2012, SN Emiline could not be present at that time. Hence, the clinic had to nominate someone else (who did not write the Standard Work) to make the presentation instead. This was done by SN Regina Lee who delivered a short overview of the effort, and PSA Siti Raudhah Bte Mohd. Mawassi who confidently demonstrated the operation of the couch, impressing the senior management staff present.



PSA Siti Raudhah Bte Mohd. Mawassi demonstrating to senior management how to operate the examination couch, after taking over the floor from SN Regina Lee (also in picture).

This showed the document's effectiveness in helping to transfer knowledge to new staff in a clear and consistent manner.

#### MAKING THE IMPACT

This document has been shared with other clinics since its inception. Besides this, Karen shared an interesting observation about this effort's impact on the PSAs, **"There's a perception among our PSAs that nurses will know how to operate the couch better... Of course this is not true, but it is this perception that prompts them to ask the nurses, whenever they are unsure on how to operate the couch. How do we know the effort is effective? As I walk through the clinic now, I no longer see our PSAs asking nurses on issues pertaining to operation of the couch. To verify, I have interacted with some PSAs, and they have demonstrated that they now feel more comfortable and more confident handling this couch."**