

Elevating and Reducing Discharge Time of Self-Pay Post Natal Patients



KPJ Perdana Specialist Hospital (PdSH) is a private specialist hospital under KPJ Healthcare Berhad. It opened its doors since 2001 and is now located in Kota Bharu, Kelantan. PdSH aims to provide efficient and excellent medical and clinical services with the latest sophisticated equipment and software to cater to the needs of today's patients. At present, PdSH has a maximum capacity of 126-beds and would cater more to market demands in the future.

The slogan "Care for Life" in PdSH is to provide vital quality healthcare in terms of patient safety and services. The medical team and support are comprised of professional skilled medical experts and staff.

It claims to have top notch excellent services plus value for money especially on patient safety measures in the daily routine operations of the hospital. Patients will get exactly what they are paying for with satisfaction.

Life-long Productivity initiatives in PdSH

PdSH is actively involved in enhancing its performances in producing excellent amenities focusing on patient safety, work process efficiency and cost saving. It has also fulfilled the required accreditation standards of healthcare providers on Integrated Management System (IMS) including Quality Management (MS ISO9001 : 2000), Environment (MS ISO 14001 : 2004) and Occupational Safety and Health (OSHAS 18001 : 1999) Systems and SIRIM certification. All these enhancement strategies need to be implemented concurrently to transform PdSH into one of the most advanced private healthcare providers in the country. The hospital has participated in benchmarking project, 5S implementation, Innovative and Creative Circle (ICC) activities and is also involved in the LEAN healthcare project.

PdSH management team welcomes innovative ideas from hospital staff to bring about great positive changes in upholding to its name. Creative ideas among hospital staff are encouraged to be put into use such as shortening of waiting time for post natal care patients. Due to the increasing number of birth rates every year on rooms availability, LEAN approach has been introduced. This project is successful implemented as it has reduced the discharge time for post natal patients from 5 hours to approximately 2 hours and 44 minutes.

LEAN work flow process to speed up time

There are significant benefits when applying LEAN principle approach to a hospital environment. It can improve the work flow

process and also eliminate certain types of wastage. In the earlier stages, PdSH has identified non-value added activities through Value Stream Mapping (VSM) exercise. The VSM approach allows discharge processes to be viewed in their entirety, from the check out time of post natal patients to the final stage of process. With the implementation of LEAN initiatives process, 31 steps have been reduced to 20 steps simultaneously. The LEAN project took eight months for completion and six Kaizen actions have been identified for the success of this project.

Analysis of LEAN project in PdSH

LEAN approach has managed to identify and ultimately eliminate 11 non-value added activities which have shortened the distance taken. The lead time of discharging self-pay post natal patient is reduced to 2 hours and 44 minutes, an improvement of 46.8 percent. Hence, discharging patients could be done with a minimum of 15 patients within 3 hours. The Process Efficiency ratio has also improved by 75.5 percent from 37.2 percent. Thus, all these improvements had brought this hospital to receive higher bed revenues from RM313,677 in the first quarter to RM674,773 in the second quarter of 2014. An increment of 113 percent revenue was generated. This proved that LEAN project provides a win-win situation to the patients as well as to the hospital in the long-run. With the elevating and reducing discharge time of self-pay post natal patients in PDSH using LEAN have thus made this project to be successful.

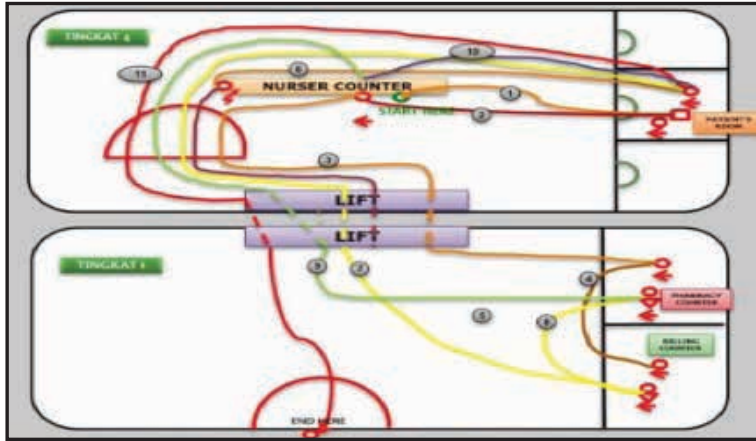
Matrix before and after LEAN project :

ISHIKAWA APPROACH OF ROOT CAUSE IDENTIFICATION	KAIZEN IMPROVEMENT
Distance of 152 metres taken by staff nurses on discharging a patient	<ol style="list-style-type: none"> 1. Eliminating utilisation of distance time taken from Level 1 to 4 vice versa. 2. Prescriptions of medicines using fax machine to pharmacy unit. 3. Dispensing of medicines to patients wards via pharmacy staff.
Manual system of patients' records	<ol style="list-style-type: none"> 4. Special discharge counter for discharge documentation, final bills and payments at level 4 only. 5. Develop online view system to speed up the process of bill inspection by the chief cashier.
Heavy burden of tasks assigned to a staff	<ol style="list-style-type: none"> 6. Speed up the discharge documentation procedures by skilled staff.

DESCRIPTION	BEFORE	AFTER
1. Number of processes	31	20
2. Lead time (minutes)	308	164
3. Distance (metres)	152	102
4. Number of staff	5	2
5. Lift utilisation (times)	6	4
6. Process Efficiency ratio (%)	37.2	75.5
7. Cost saving in wages (RM)	14,100	7,050
8. Bed revenue (RM)	313,677	674,773

Distance travelled 'before' and 'after' using LEAN approach

BEFORE (152 meter)



AFTER (102 meter)

