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Submitting author: Mr Vincent Ki Fung MOK
Post title: Advanced Practice Nurse, Queen Elizabeth Hospital, KCC

Service Improvement in QEH Pre Admission Service
Mok KFV(1), Hung YKS(2) , Ngai SCJ (2), Ching A.(2), Law J.(1), Yip C(3),Kwong MK(2)
(1)Department of Medical Specialty, Queen Elizabeth Hospital, (2)Central Nursing Department, Kowloon Central Cluster, (3) Anaes & OTS, Queen Elizabeth Hospital

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Introduction
Long waiting time   is a common cause of patients' dis-satisfaction. The duplicated work process and re-work contribute to long waiting time in Pre Admission Service (PAS). It increased the healthcare costs and affected the job satisfaction of staff as well.   A Six Sigma black belt project was conducted at PAS since April 2014 to July 2015. With the aim to lean the pre-operative assessment work process and decrease unnecessary re-work.

Objectives
1. Decrease waiting time (Non Valued Added) by (33%)   2. Decrease the numbers of Rework by (16%)   3. Increase the numbers of Case per day (20%)   4. Increase the average Staff Satisfaction Rate (10%)

Methodology
By using Lean 6 Sigma DMAIC (Define Measure Analysis Improvement Control) and some lean management technology, we measured the process time and waiting time pre and post project. The complexity of the cases was categorized by American Society of Anesthesiologists (ASA). We measured both within and between groups by Fishers' Exact Test and paired T –Test Comparisons.

Result
This project successfully decreased the numbers of rework and enhanced patients' and staffs' satisfaction. The non value added waiting time is significantly drop and increase the service capacity with efficiency gains at PAS & PAC as well.   1. Non-valued waiting time decrease from 110mins to 85 mins (23%)with (p=0.058)   2. No. of reworks on T&S decrease from 86 to 52 (40%)(p<0.01)   3. Cases per day increase 25 to 29 ((16%)with p=0.076   4. Staff satisfaction increase from 86/124 to 90/124 (3%)p=1.568   Outcome: In this study, the reduced need for perioperative transfusion(<1.33 % only)   in the intervention group aroused concerns for further research. The practice of routine cross match should be review and in line with

international practice. This would result in substantial cost savings for the organization and further eliminate the re-work up at PAS.