

**Project Title**

Nurse-Led Discharge in MAC

**Organisation(s) Involved**

Tan Tock Seng Hospital

**Project Category**

Workforce Redesign, Care Redesign, Process Improvement, Quality Improvement

**Keywords**

Workforce Transformation, Workforce Redesign, Job Redesign, Nurse-led Discharge, Enhance Clinical Judgement, Enhance Decision-making, Job Satisfaction, Staff Empowerment, Staff Upskilling, Quick Turnaround Time, Post Anaesthesia Discharge Score, Flexibility Scalability and Efficiency, Elective Admissions, Care Redesign, Process Redesign, Process Improvement, Quality Improvement, Reduce Waiting Time, Cost Saving, Production Preparation Process, Bed Optimization, Improved Safety Indicators, Readmission Rate, Tan Tock Seng Hospital, Nursing, Medical Ambulatory Centre

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# Asian Hospital Management Awards

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## **NURSING EXCELLENCE (New!)**

Nurses are at center of how the physicians and other hospital departments cooperate and coordinate services to serve the patient better. Nurses interpret, disperse and collect results of what the doctor ordered. They are the front line, and see the patient more often than any other service. The award is for a project or program that improves the patient experience because of improvements and innovations in how nursing care is delivered. Does the project help communication within departments of the hospital? Does it improve the patient experience? Does it reduce nursing or other error from any department? Does it lead to better patient well-being and comfort? Does it lead to better care, rendered faster?

**Complete All Information Below:**

**Project Title (Maximum 256 Characters): Nurse-Led Discharge in MAC**

**Date Project Started (Maximum 128 Characters) (i.e. May 24, 2015): March 2015**

**Department Name (Maximum 256 Characters): Medical Ambulatory Centre**

**Names of Key Staff Involved in this Project (Maximum 512 Characters) (Separate names with comma): Rosaline Yeo Lay Peng, Adeline Ng Chee Wee, Fiona Fung, Mai Moh Moh Thu**

1. Please give a background of the project or program, including WHY it was implemented. Give details of specific measurement, goals and targets for the project. **Maximum Number of WORDS – 300**

Medical Ambulatory Centre (MAC) was first developed with the aim of establishing an ambulatory model as an alternative to inpatient care. With the high bed occupancy rate (BOR), MAC was established to provide patients with the flexibility of coming in for scheduled procedures such as blood transfusion, IV infusions and bedside procedure. Patients will then be discharged within 8 hours from MAC instead of occupying an inpatient bed. Since MAC was set up in January 2015, it has managed 3,537 ambulatory patients who would previously have been admitted for the above to inpatient. This has helped to release 7,074 bed days in 2015 for acute admissions. By incorporating dual admission period (8am and 5pm admission), our ultimate aim is to maximise the full utilisation of beds. After procedures are rendered to patients, they could wait up to 90 minutes for discharge process to begin. The downstream impact of this are patients scheduled at 5pm would have to wait for their beds as the 8am patients are unable to be discharged.

#### Target State

**Nurse-led discharge** in MAC will allow the discharge process to be initiated the moment discharge decision is made. Instead of waiting for 90 minutes for discharge process to begin, we aim to reduce the time by 30% — 60 minutes.

**Improved safety indicators:** MAC will track key indicators of readmission rate within 48 hours. Our target rate would be below 5%.

**5 PM scheduled admission:** Zero wait time for next scheduled appointment patient.

Word count: 244/300

2. Please describe IF and how the improvements were also beneficial from the patient's perspective and experience, and how it improved patient care, patient safety or service from a nursing perspective. Preferably please present quantifiable information such as "before and after" measurements if any. **Maximum Number of WORDS – 200**

Nurse-led discharge benefitted the nurses as it has empowered them to widen their roles such as enhance clinical judgement and decision-making. It provides an opportunity and motivation for the nurses to up skill and it also increases job satisfaction. In addition, they spend less time calling the physician, and doing constant follow-ups to ensure documents are done. It has reduced the fear of not meeting up to the patient's discharge timing expectations.

From the Physicians' perspective, it enables them to focus more on patients who require immediate attention located in the acute setting.

There is a reduction of wait time from 90 minutes to 40 minutes. A stretched target of 44% reduction from what we initially aimed. The discharge outflow is hastened as the patient is not required to be reviewed by physician post procedure, thus they experience a faster and efficient discharge process.

Word count: 144/200

**3. Please explain what other benefits were derived? Is it simple yet effective, something other nursing departments can also adopt or adapt? Were appropriate analysis tools used or was it only a matter of throwing money at the problem? Maximum Number of WORDS – 200**

With nurses on site managing the discharge process, this ensures beds are managed better and efficiently. With the fast-in-fast-out process, this enables quick turnaround time which could translate in achieving effective usage of resources in the healthcare setting.

Post Anaesthesia Discharge Score (PADs) is used as a standardised tool that can be utilised when discharging without compromising patient's safety. This tool was adopted from the surgical setting (endoscopy centre and day surgery) to facilitate in the discharge process. It has minimal deviation across the different hospital settings and thus, the principle of patient care and monitoring is the same.

Collaboration was made with the Clinical Director of MAC and respective department doctors. Department of Haematology (DHM) team was selected to be our main stakeholders. They have the highest patient load and patients coming in with blood transfusion or IV infusion have more definitive treatment and discharge plans. With the feasibility of incorporating PADs for nurse-led discharges in MAC, it will help save cost in the long run.

Word count: 167/200

**4. Please give some background to the project team that originated, studied and developed the project or program. Maximum Number of WORDS – 200**

3P (Product and Process Production) was conducted in 2013 with the intent to operationalise MAC effectively through protocolised care. The aim was to achieve flexibility, scalability and efficiency. The layout and infrastructure was carefully mapped out so that it could optimally meet the demands of the patients. With the new set-up facility, a targeted project team was formed to look into the patient's discharge process to optimise the quick turnaround time for the beds. This allows the maximisation of the beds, which in turn releases inpatient beds for acutely ill patients.

Word count: 91/200

**5. Please explain how significant were the results or outcomes? Are these measurable? Are there testimonials, awards or other support to show impact on improvement of the department or unit's service? Maximum Number of WORDS – 150**

6-months data was collected from 2015. There was a total of 164 hours and 26 minutes waiting time for the physician to prepare discharge documents. Following nurse-led discharge, waiting time was reduced from 90 minutes to 40 minutes. The team was challenged to further reduce it to 30 minutes.

Readmission rate — an important indicator of nurse-led discharge. Data on patient's last visit in MAC correlates with the next visit via inpatient admission. MAC will screen relevancy of patient's readmission. Target is below 5% and our readmission rate was 2%.

5pm scheduled admission — Our stretched target for zero wait time for next patient proved challenging. 40% of patients managed to get their beds before 5pm. Our data was based on the SAP time of admission, it was not conclusive if the beds were not ready or patients were late. Moving forward, actual timing will be tracked based on point prevalence data.

Word count: 150/ 150

**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. Maximum Number of WORDS – 300**

The responses of nurse-led discharges are well received from physicians, nurses and patients. It has proven to be suitable for elective admissions.

From the nurses' perspective, it has empowered them the self-determination for decision-making based on the criterion given to them.

As for the Physicians' perspective, with the improved work processes, it enables them to focus on the more acutely ill patients. With nurse-led discharge in place, it creates a trusting relationship between the doctor and nurse. Physicians have requested for our team to explore the feasibility of spreading to other procedures in MAC. On that positive note, we are working with them to embark on this journey in MAC.

From the patients' perspective, nurse-led discharge enhances patient experience with minimal delay in waiting time for discharge and communication was improved, creating less confusion. With this in place, it adds value to the entire MAC's visit experience.

#### *Feedback*

**Tan Nam Hung** (Regular patient, age: 54)

*"I have been here for few times for blood transfusion and is always time consuming waiting for the doctor to review and put up documents. It often results in frustration while waiting. With the nurse-led discharge, it has helped by allowing me to better arrange the timing for which my family member can pick me up without delay."*

**Professor Alan Ng** (Clinical Director, MAC)

*"Nurse-Led Discharge had cut down waiting time and allows physicians to focus on other patients who require critical medical care. Looking through the Nurse-Led Discharge success implemented in endoscopy centre, MAC proved to be an ideal department to initiate Nurse-Led Discharge. Work is indeed more efficient and prompted them to kick start patient discharge process."*

Word count: 274/ 300