

## ANNEX A

### UP Skills & UP Career Progression

#### NATIONAL HEALTHCARE GROUP (TAN TOCK SENG HOSPITAL)

##### **Tan Tock Seng Hospital Re-designs Career Pathway for Patient Service Associates**

*New Executive Level and Competency Based Learning Roadmap Introduced to ensure more opportunities for Development*

Tan Tock Seng Hospital (TTSH) has re-designed the career pathway for Patient Service Associates (PSAs) to provide more opportunities for them to develop professionally. Amongst improving productivity levels and job satisfaction, the framework also introduces an executive level job scale which offers career progression.

An internal survey done amongst PSAs showed that 81% expressed a willingness to learn and promote patient-centric care services such financial counseling, patient education and medication reconciliation.

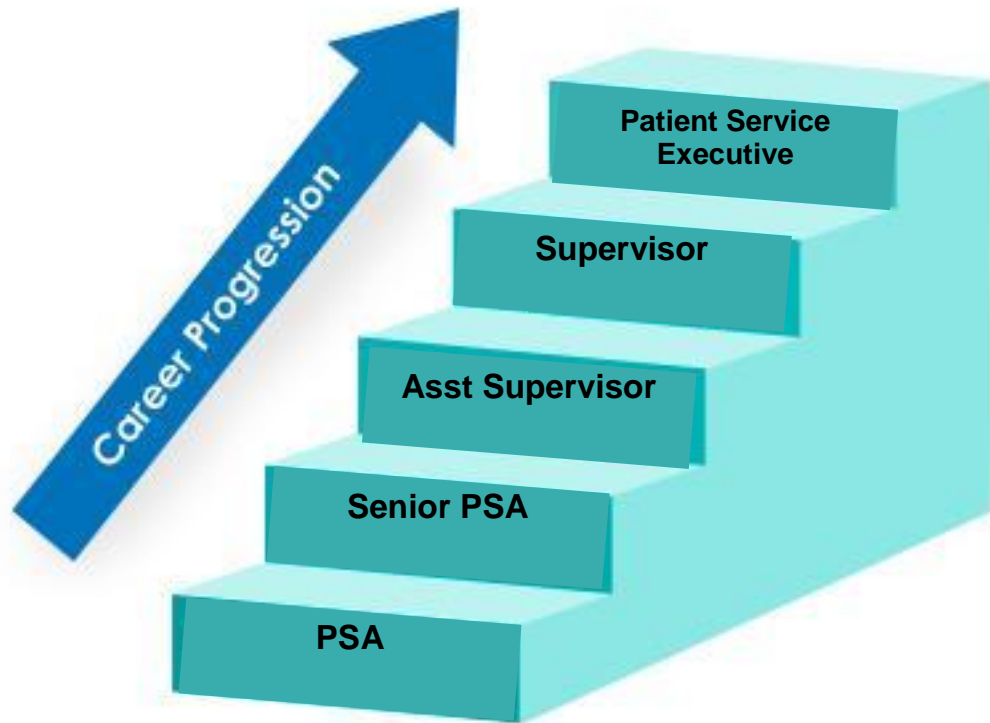
Traditionally PSAs focus on core operational centric procedures such as assisting doctors with case notes, appointment bookings, patient registration and billing. They also see to front-line patient relations. In addition to such roles, PSAs will be trained in medication reconciliation to help patients navigate through simple medications and educate patients on their basic medical conditions.

With the new job redesign scheme underway, these patient-oriented value add services are now a reality in the associates' daily work. To prepare them for their new roles, PSAs are given professionally structured training and learning modules specifically designed to up skill and provide job satisfaction.

The new framework which is a ground up initiative was co-designed with the PSAs, allowed for clarity on what satisfaction and career progression meant. Feedback on what would ensure better job satisfaction showed that more than 50% would like to hold leadership responsibilities and be able to manage a team of associates. Now more empowering roles will be given to associates who are Asst Supervisors and Supervisors to manage a team. Following promotion to the new Patient Service Executive level, associates will not only assume higher leadership roles but also be given key roles in managing projects to improve workflow processes and support the Clinic/Centre Managers in the planning, development and management of clinic resources to meet the hospital's objective of patient care delivery.

The new framework with its emphasis on productivity, satisfaction, empowerment and retention of will ultimately better the patient experience thanks to the multi-skilled and functional competencies of the PSAs.

PSA career enhancement chart



###

## **UP Skills & UP Career Progression**

### **NATIONAL HEALTHCARE GROUP POLYCLINICS**

#### **Digital Documentation System (DDS)**

This project was undertaken when National Healthcare Group Polyclinics (NHGP) implemented an Electronic Medical Records system which captured all patients' records electronically instead of keeping physical patients case files manually.

Previously record keepers had to pull out patients' case files manually while health attendants had to dispatch the case files to the doctors' consult rooms. With the digitization of the medical records, the record keepers no longer need to pull out patients' case files physically. Doctors are able to access the medical records electronically.

With the role of record keepers then redundant, NHGP took steps to upskill their Record Keepers and Health Attendants. Record Keepers learned new skills and took on new roles as Digital Archival Assistants. Health Attendants were upskilled with appropriate job upgrades and salary adjustments in phases as they were trained and deployed to take clinical measurements of patients (such as height, weight and blood pressure) which were previously done by doctors and nurses in the consultation rooms. The wages of these staff were adjusted appropriately in phases to reflect the new and added roles they took on.

NHGP's DDS project resulted in the timely electronic capture of all patients' physical records. This greatly eliminated wastage in the patients' medical record workflows, thus easing the retrieval of records during the clinical consultation with patients. Patients also no longer need to wait at the clinics for the record keepers to retrieve/deliver case files, and their records can be accessed regardless of the Polyclinics they go to.

## **UP Skills**

### **SINGHEALTH POLYCLINICS**

#### **Improve patient experience in SingHealth Polyclinics**

Patients' needs and expectations are changing and this calls for a fresh approach to patient service. In conjunction with SingHealth Polyclinic (SHP)-Geylang official re-opening, SHP launched the Service Ambassador initiative to provide a better experience for our patients. Donning a new badge, the nine Service Ambassadors started this initiative in all nine polyclinics. The Service Ambassador initiative is part of the training programme for the role of Patient Care Associate. Currently, SHP has 50 Patient Care Associates.

In addition, our frontline staff in SHP are being sent for training on enhancing patient experience.

## **UP Productivity**

### **ALEXANDRA HEALTH (KHOO TECK PUAT HOSPITAL)**

#### **1. Food Service Operation / Nursing**

Khoo Teck Puat Hospital (KTPH) implemented a customised Electronic Meal Ordering System (EMOS) in May 2013 that has led to a better patient experience with visual food choices. At the same time, the initiative has improved the productivity of nurses and the Food Services team, saving the hospital seven man hours daily.

Previously there was a lot of manual work involved such as printing of meal slips, collection of meal slips from wards and also extra manual checks to reduce any potential error of serving of wrong diet to patients.

#### **2. Housekeeping**

Using machinery, KTPH has been able to up-skill its housekeeping staff to increase productivity in the cleaning of toilets, wards and corridors. This has led to total savings of 22 man hours daily and enabled older workers to join the hospital, providing quality work that is equivalent to that of younger staff.

## **UP Productivity**

### **NATIONAL HEART CENTRE**

#### **To Streamline Non-Invasive Cardiac Investigations Reporting Workflow**

At the National Heart Centre Singapore (NHCS), the Specialist Outpatient Clinics provide treatment of heart diseases and rehabilitative programmes on an outpatient basis. Prior to the consultation, patients are typically required to be assessed by the Cardiac Laboratory. Non-Invasive Cardiac Investigations (NICI) form one of the three interdependent areas in Cardiac Laboratory. These diagnostic tests are projected to grow rapidly over the next few years with the rise in cardiovascular diseases.

In anticipation of the projected 55% increase in NICI by 2017, an in-house web based CardioVascular Information System (CVIS) was developed to digitalise the NICI workflow. CVIS allows uploading, reporting, retrieval, monitoring and archiving of all NICI reports on a single IT platform; hence providing a more efficient reporting and archiving system and improving reports' turnaround time.

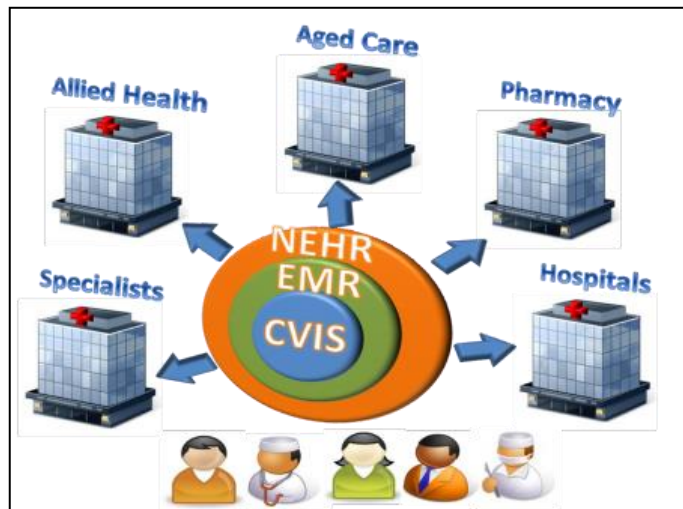
### Key Features of CVIS

CVIS is a unified streamlined physician reporting system that auto-archives reports. It is able to automate communication within intra-hospitals through the cluster Electronic Medical Records (EMR) and National Electronic Health Records (NEHR), providing a comprehensive database for cardiology departments at a national level.

Its user-friendly interface and structured reporting has provided a fast, efficient and simplified NICI workflow. It is integrated to handle multiple-modules which greatly reduces administrative burden such as manual repetitive backend processes which in turn reduces the possibility of errors.

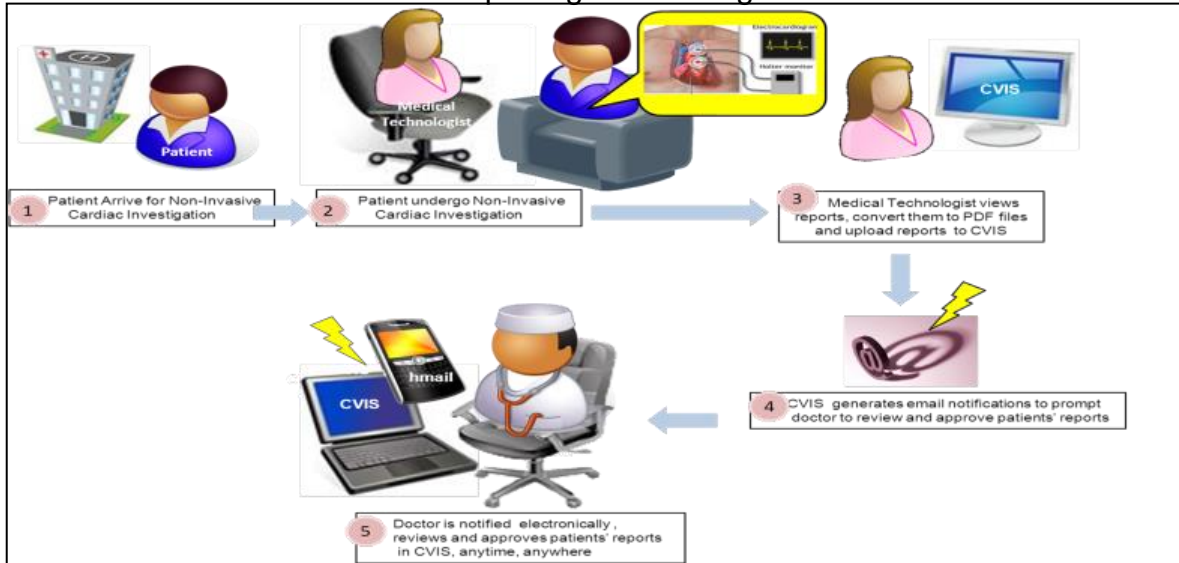
Clinicians can access CVIS reports conveniently through their user log-on via NHCS intranet from any work computer. The online NICI reports allow physicians to have accurate, prompt diagnosis and treatment of the patient's condition. Reports flowing into the EMR and NEHR also allow physicians in other institutions access to the patients' medical records during emergency.

CVIS Interface with EMR & NEHR



With increased reporting efficiency, there is improvement in the quality of care, patient safety, reduction of costs and better staff satisfaction. It is also sustainable as the healthcare staff can devote more time to handle the higher patient load to meet the rising demand.

### The Streamlined NICI Reporting & Archiving Workflow with CVIS



### Benefits of CVIS

With CVIS, clinicians can generate procedural reports and sign it immediately after the case. Automatic daily email reminders reduce the tendency to accumulate backlogs of reports. Overall reporting turnaround time was reduced from 27 to 7 days, improving efficiency by 74%. The remarkable improvement is a result of faster communication by having all different tests reports retrievable from a single source. Tracing case notes for reports is no longer required. Its interface enables patients' medical data accessible across the national healthcare continuum through the NEMR and NEHR facilitating holistic care across different specialties and hospitals.

With the new system, procedure coding is automated to help reduce errors. Reports are archived online without reliance on hardcopies. Additionally, with digitalised reporting and auto-computed formula, it eliminates error of manually calculating certain test scores, hence improving report's accuracy.

Due to the conversion of reports into digital format, CVIS helps reduce annual paper usage by at least 200 reams, eliminates third party storage and retrieval of hardcopy reports. It eliminates the manpower to maintain the filing, storage and archiving of these hardcopy reports. It is estimated that cost savings are in excess of \$45,000 annually.

## UP Productivity

### NATIONAL UNIVERSITY HEALTH SYSTEM (NATIONAL UNIVERSITY HOSPITAL)

#### Aim(s)

Due to the high patient load in EMD and limited space for storage of supplies, inventory in Emergency Medicine Department (EMD) requires constant top-ups and ordering. Existing inventory management system was time-consuming and often resulted in inaccurate stocking. Staff were stressed and care for patients were compromised.

This project aimed to provide more timely care to patients and reduce stress for staff by focusing on

- More accurate stock-checking and ordering
- Easier and faster retrieval of supplies and reducing storage space
- Reducing time spent on topping up supplies in cubicles
- To have supplies at P1 and P2 cubicles available 90% of the time.

#### Methodology

6S was implemented on existing facilities, organizing the work environment through sorting & scraping, straightening, shine, standardization and sustainment to facilitate the inventory flow and management. Results were tracked to ensure sustainment. Locations of medical supplies were reconsidered to minimise staff movement.

External vendors were also invited for a discussion during the project discussion, allowing external parties' perspective to be considered.

#### Result

The following encouraging results were obtained:

- 237 staff benefited from this project
- Error rate of orders reduced from **8%** (Nov 10) to **0%** (Mar 12);
- Time spent topping up of supplies at patients' cubicles reduced from 190mins to 61mins (by **68%**)
- More manpower time saved, allowing more time to be spent on patient care.
- Total number of stores was reduced from 7 to 5, reducing staff movement.

#### Conclusion

The redesigned inventory management system in EMD has achieved the objectives of providing more timely care to patients and reducing unwarranted stress for staff. Moreover, the collaborations between EMD and external parties have resulted in win-win situations. This project has therefore, improved patient care by improving staff morale and strengthening coordination of care between departments.

###