Project Title

Operating Theatre Nurse's Cross Training to Enhance Manpower Deployment

Project Lead and Members

Project Members: Phua Yu Ling Elizabeth, Soh Ling Ling, Tan Hui Ling

Organisation(s) Involved

Singapore National Eye Centre

Healthcare Family Group(s) Involved in this Project

Nursing

Applicable Specialty or Discipline

Emergency Medicine, Surgery

Project Period

Start date:

Completed date:

Aims

- To cross train 5% of the OT nurses in each surgical ambulatory services units in a year.
- To enhance OT nurse's preparedness for nursing deployment to other surgical ambulatory units and satellite OTs.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

With successful cross training of OT nurses, it enhances a flexible and adaptable nursing manpower which increases nurses' preparedness and readiness in response to manpower deployment to other nursing units. This training initiative can be shared to other domains to enhance staff deployment strategy.

Project Category

Workforce Transformation

Workforce redesign, Professional Development

Keywords

Nursing manpower, Cross Training

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Operating Theatre Nurse's Cross Training to Enhance Manpower Deployment

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Background

Healthcare systems in the world are facing nursing manpower shortage which become increasingly challenging as the demand of healthcare services continues to rise. It is important to address these challenges by strategizing measures to optimize the nursing manpower deployment. Taking proactive measures to build stronger foundation is crucial in achieving nursing manpower deployment. Covid-19 pandemic had taught healthcare worker to be adaptable and ready for deployment to ease the pressure in high demand clinical areas.

Singapore National Eye Centre (SNEC) operates surgical ambulatory services that runs pre-surgery services (PSS) clinic, Dayward and 13 Operating Theatres (OT) including satellite theatres. To cope with nursing manpower constraint between departments, nursing competency and staff preparedness needs to be planned to facilitate nursing deployment.

Aim

- To cross train 5% of the OT nurses in each surgical ambulatory services units in a year.
- To enhance OT nurse's preparedness for nursing deployment to other surgical ambulatory units and satellite OTs.

Problem Statement
Shortage of manpower in daily assignment within the surgical ambulatory units and nurses are not prepared to be deployed to other clinical area.
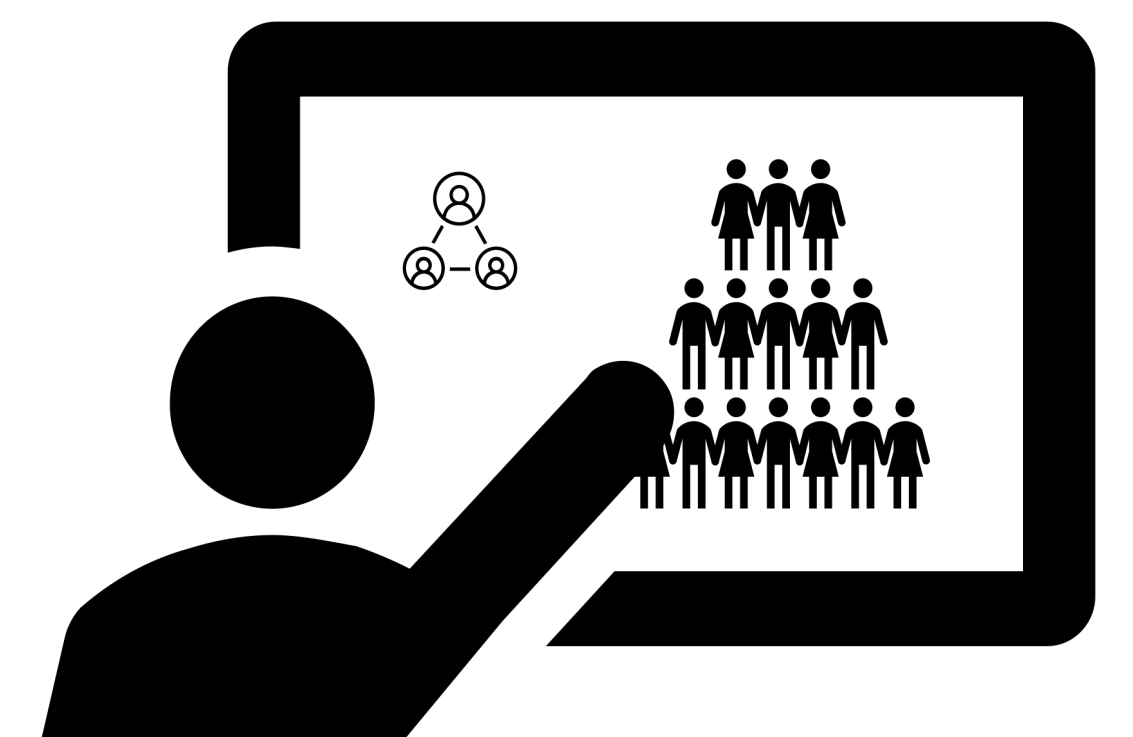
Methodology

A needs analysis (Christensen, 2018) was used to identity the desired nursing manpower management within SNEC Nursing Ambulatory Surgical department. SNEC OT nurses are trained to be adaptable with daily nursing deployment within the OTs as they are equipped with specialized technical and non-technical skills as a peri-operative nurse. With the lean manpower available in Dayward and PSS units (Table 1.), it is essential for OT nurses to be ready to assist the nursing manpower within the Ambulatory Surgical department.

Surgical Ambulatory Service Units	Number of Clinical Areas	Daily Patient Load (Average)	Manpower (Average)
Operating Theatre	Total: 15 • 10 OTs (SNEC Main) • 3 Satellite OTs • 2 Recovery/ PACU	Total: 118 Patients • SNEC Main: 95 • Satellites: 23	Total: 67 Nurses* 4 nurses per clinical area
Dayward	Total: 6 • 2 Pre-op (SNEC Main) • 2 Post-op (SNEC Main) • 2 (Satellite Dayward)		Total: 29 Nurses* 5 nurses per clinical area
Pre-surgery Services	Total: 4 • Private Counselling • Subsidized Counselling • ECG Room • Telecare	Total: 70 Patients	Total: 11 Nurses* 2 nurses per clinical area 4 nurse for subsidized counselling

(*not inclusive of nurse's leave and training)   Table 1.

Identify ① **Criteria Selection**

To prepare OT nurses for deployment, they needs to be equipped with the necessary nursing skills and competency for deployment to be effective and efficient. **Cross training** was adopted to enhance OT nurse's readiness.

Criteria for OT Nurses
- > 1 year OT experience
- Agreeable to be cross trained
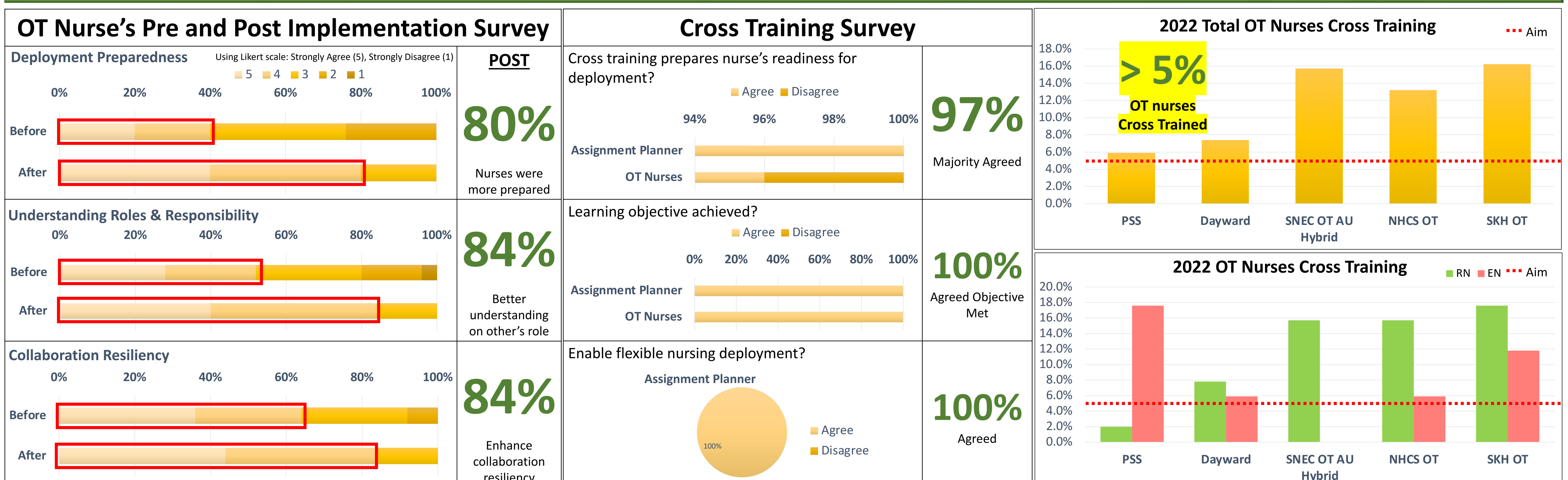- To be trained in at least 2 ambulatory units

Ambulatory units needs differs:
- ❖ Registered nurse and enrolled nurse's job roles differences
- ❖ Train according to unit's nursing skills mix
(different ambulatory unit may require more RN/EN to be trained)

Develop ② **OT Nurse's Cross Training**

OT Nurses	Ambulatory Unit	Training Duration	Training Essentials	Assessment & Evaluation
	Dayward PSS Satellite OTs	2 Weeks per Clinical Unit (Extension if not fulfilled)	• Orientation (0.5 day) • Preceptor • Competency Checklists	Done by Unit Supervisors/ Clinical Instructor

Cross training: At least 2 clinical units

Establish ③ **Schedule**

OT nurse's training and deployment schedules were all planned ahead and plotted into the assignment roster.

Results

OT Nurse's Pre and Post Implementation Survey

Deployment Preparedness — Using Likert scale: Strongly Agree (5), Strongly Disagree (1)

POST

80% Nurses were more prepared

Understanding Roles & Responsibility

84% Better understanding on other's role

Collaboration Resiliency

84% Enhance collaboration resiliency

Cross Training Survey

Cross training prepares nurse's readiness for deployment?
(Agree / Disagree) — Assignment Planner, OT Nurses

97% Majority Agreed

Learning objective achieved?
(Agree / Disagree) — Assignment Planner, OT Nurses

100% Agreed Objective Met

Enable flexible nursing deployment?
Assignment Planner (100%) (Agree / Disagree)

100% Agreed

2022 Total OT Nurses Cross Training

> 5% OT nurses Cross Trained

(Bar chart: PSS, Dayward, SNEC OT AU Hybrid, NHCS OT, SKH OT — with Aim line)

2022 OT Nurses Cross Training

(Bar chart: RN, EN, Aim — PSS, Dayward, SNEC OT AU Hybrid, NHCS OT, SKH OT)

Conclusion

With successful cross training of OT nurses, it enhances a flexible and adaptable nursing manpower which increases nurses' preparedness and readiness in response to manpower deployment to other nursing units.

This training initiative can be shared to other domains to enhance staff deployment strategy.

Future Work

To work toward a majority of OT nurses to be crossed trained to at least 2 surgery ambulatory units and opening cross training for nurses to be cross trained into SNEC OT.

Reference
Christensen, B. D. (2018). From needs assessment to needs analysis. *Performance Improvement*, 57(7), 36-44.