

Streamlining Discharge Through Nurse Led Dispensing

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Background

Effective discharge medication workflows and counselling are crucial for ensuring patient safety and satisfaction. During the planning phase of Woodlands Health (WH), two existing workflows were reviewed for potential adoption: centralized dispensing and bedside dispensing.

Several inefficiencies were recognized, prompting the need for a more streamlined approach especially for patients with short and simple medications.

Centralized dispensing introduced an additional step in the patient journey, while bedside dispensing created inefficiencies for pharmacy staff, who had to walk back and forth between the pharmacy and patient care areas.

The Nurse Led Dispensing (NLD) model was explored. Efforts were focused on patients discharging from Day Surgery and Endoscopy. By empowering nurses to dispense medications from a standardised list, the patient discharge journey was streamlined. This resulted in a more efficient discharge process for patients while expanding the role of surgical nurses to provide holistic care.

Methodology

Introducing NLD was a multi-step and multi-stakeholder project.

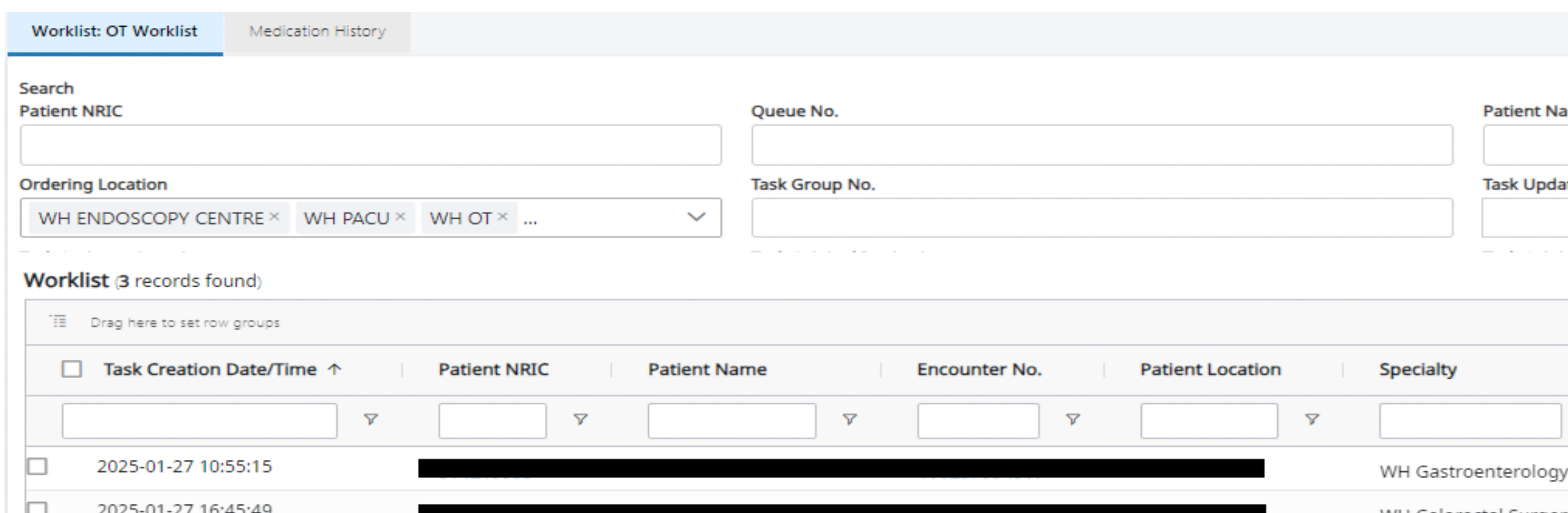
1. Stakeholder engagement

Surgical doctors were engaged to finalize a list of commonly prescribed medications from various disciplines.

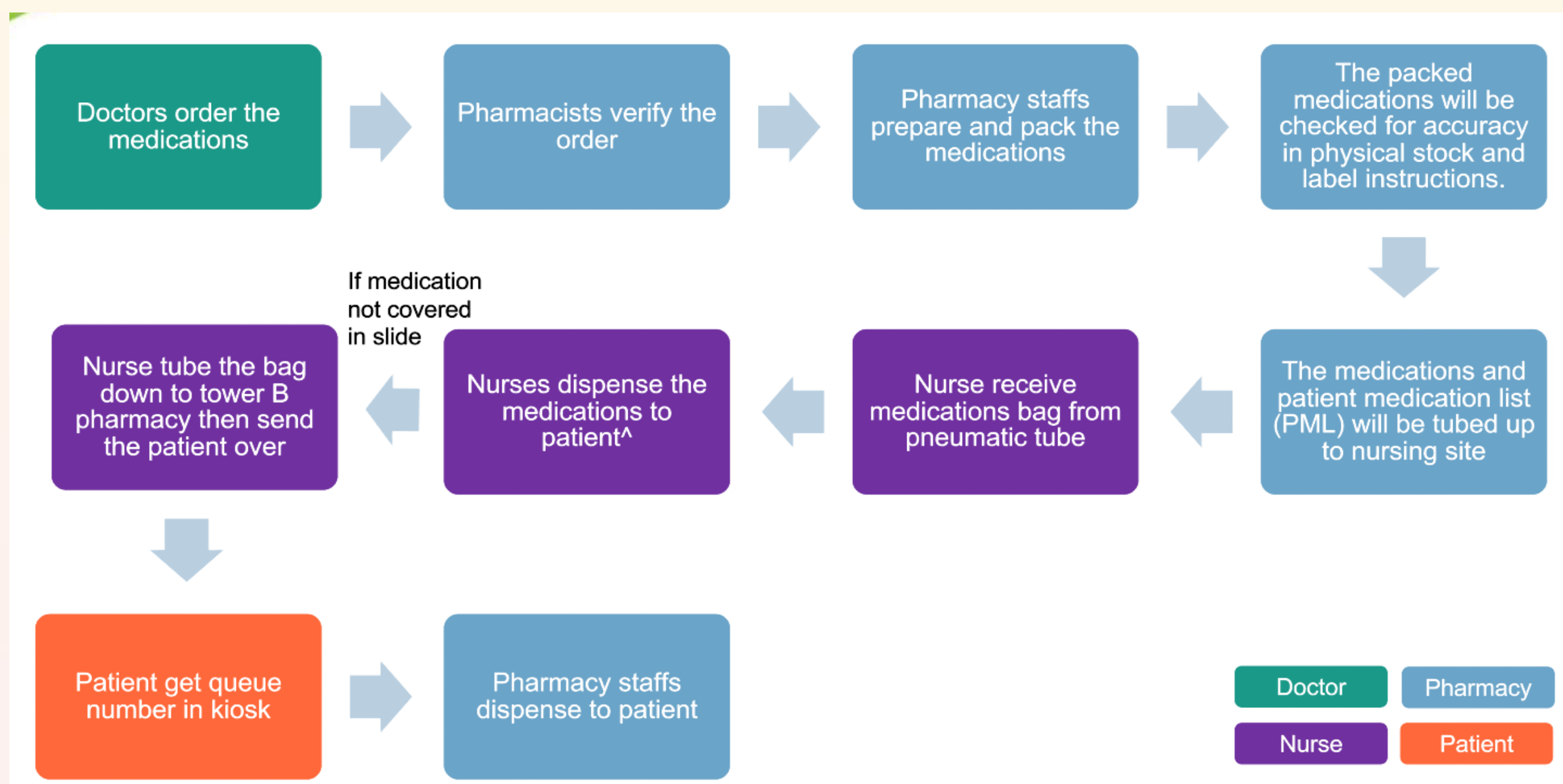
2. Workflow Design

Collaborated with doctors, informatics, nursing and pharmacy to create an efficient workflow for NLD that included:

- Creating a discharge worklist in NHIPS (National Harmonised Integrated Pharmacy Systems) to identify patients eligible for NLD (discharges from Endoscopy and Day Surgery).



- Clinical review by Pharmacist followed by physical medication verification to ensure the correct quantity, strength, and labelling of medications prior to sending medications to nurses.
- Established protocols for nurses to report new allergy information and patient rejected medications at point of dispensing
- Workflow on handling patients who were prescribed non-standard medications was also implemented where patients will receive dispensing by Pharmacy instead. This workflow was also used if nurses were not confident in dispensing certain medications.

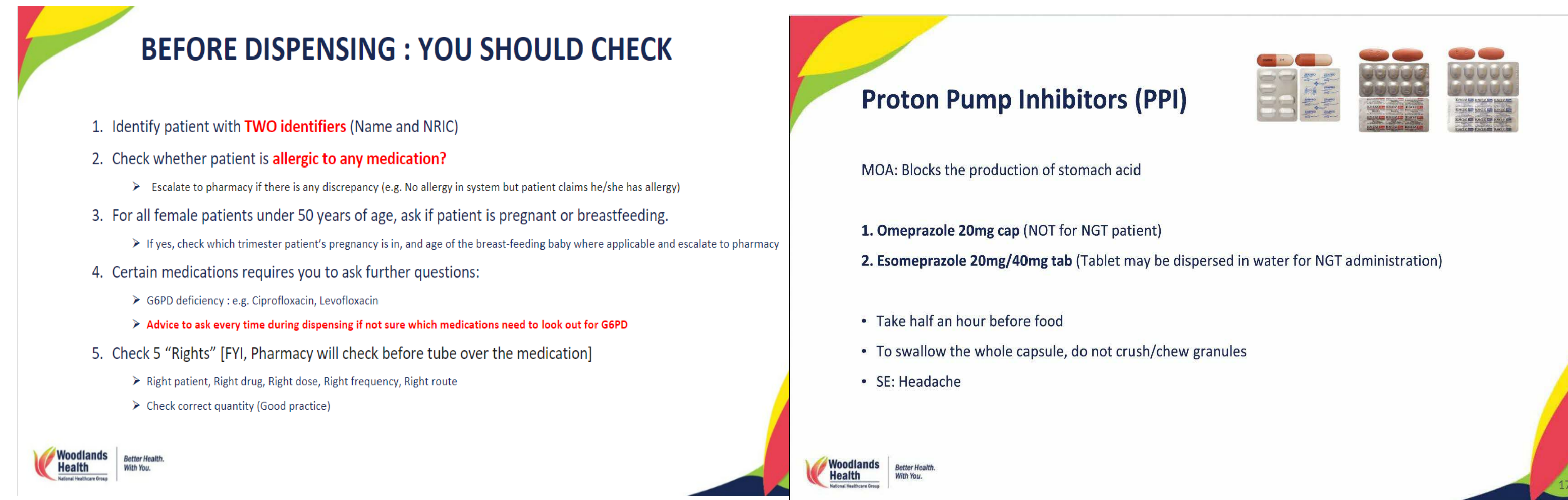


3. Training for Nursing Staff

Based on the standardised medication list from doctors, training materials were curated, detailing step-by-step dispensing processes, key information about medications, and essential counselling points.

Nurses first underwent an online training and assessment to review their understanding of the material.

Examples of training material which were ultimately reused as dispensing resources when NLD was rolled out included:



After completing the online training, nurses engaged in face-to-face mock dispensing assessments facilitated by both pharmacy and nursing teams. During these sessions, the focus was on ensuring accurate checked for allergy status and verified patient identifiers and provided appropriate medication counselling.

To ensure sustainability of NLD, a train-the-trainer model was implemented, where nursing seniors (identified by their leads) were trained to become assessors for new incoming nurses.

Following the rollout, nursing leads maintained direct access to the project leads for resolving raised issues quickly. Nurses were also provided direct contact with pharmacy to address any real-time concerns during their dispensing activities.

Results

Shortened patient journey

With the roll out of NLD, number of patients who required centralised dispensing decreased significantly. This translated into a shorter patient journey for 672 patients (in a 6-month period) who could admit and discharge directly from where they did the procedure.

Number of patients who required to come to pharmacy (6 months data)	
Without Nurse Led Dispensing	With Nurse Led Dispensing
960	288

Time Savings for patients

Average medication dispensing time decreased from 25 minutes to 5 minutes, achieving an average time savings of 20 minutes per patient due to removing the need to walk to Pharmacy and wait.

This amounted to a total of 26,880 minutes (or 448 hours) saved in 1 year.

Patient education effectiveness

There was zero request for medication counselling clarification from patients, indicating effective communication and education.

Positive staff feedback

Survey results reflected strong support for the initiative, with majority of Nursing (88%) and Pharmacy (91%) stakeholders in favour for expansion with the remaining being indifferent. There was no response against the service expansion.

Discussion

The implementation of Nurse Led Dispensing improved discharge efficiency and decreased time and steps in overall patient journey.

The success of this initiative relied heavily on collaboration between the nursing team, surgical doctors and pharmacy staff. Early engagement of all stakeholders helped formed a cohesive workflow and led to NLD's successful rollout upon WH's opening.

There are also challenges faced, which requires NLD to be reviewed and workflow adjusted. With evolving prescribing practises and patient needs, more patient have medications that fall outside the standard medication list.

Continuous feedback mechanisms implemented are crucial to identify issues and address them quickly.

Acknowledgement

We would like to express our heartfelt gratitude to the nursing and pharmacy team for their dedication and hard work throughout the implementation of NLD. Special thanks to the surgical doctors for their support which was vital to the success of this project.