

# Increasing pharmacy hours increases patient flow: an evening pharmacist shift trial

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## Background

Early morning discharges (EMDs) help facilitate overall patient flow within the hospital. At The Northern Hospital, T2 is the medical ward with the highest number of discharges per week. There is a high complexity of patients encompassing respiratory, neurology, stroke and general medicine specialties.

Medical staff prepare discharge paperwork for EMDs the night prior, after pharmacy hours. To better facilitate EMDs, an extended pharmacy service was trialed on T2 during winter 2018 to better align with the hours of junior medical staff. An evening Grade 2 pharmacist shift was implemented from 4:00pm to 8:00pm on weekdays, in addition to the standard 8:30am to 5:30pm shift. Their primary role was to dispense discharge prescriptions and counsel patients for EMDs.

## Description

1. To increase the number of EMDs improving patient flow within the hospital
2. To improve efficiency of pharmacy service, reducing delays to discharge
3. To improve patient safety by increasing number of Medication Management Plans (MMPs) completed by pharmacists

## Action

Data was collected pre- and post-implementation, from April 2018 until September 2018, including weekly number of discharges from T2 prior to 12:00pm, number of MMPs completed, quality data and feedback from staff and patients.

## Evaluation

The trial demonstrated a 50% increase in number of T2 patients discharged before 12:00pm. The weekly average of patients discharging before 12:00pm increased from 8 to 12 patients (figure 1).

MMP completion significantly improved. Before the trial 18% of discharge scripts had an MMP completed, compared to 83% after trial commencement. MMPs reduced time spent checking discharge prescriptions (29 min with vs. 46 min without MMP). MMPs improved medication safety and patient outcomes, reducing the number of prescribing errors and earlier identification of medication related incidents.

Pharmacy staff reported less stress coordinating EMDs and improved patient safety with more timely MMPs.

Patients were more satisfied, considering their transition home better organised without the frustration of waiting for medications.

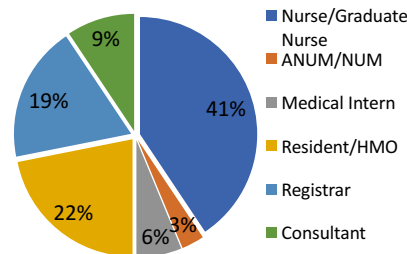


Figure 2: Survey Participants (Total 32 responses)

Feedback from nursing and medical staff reported the trial allowed for more efficient EMDs and safer evening discharges outside of standard pharmacy hours.

Improved medication safety and patient outcomes with increased MMPs was highlighted. 87.5% of ward staff considered there was significant improvement in workflow (figures 2, 3 and 4).

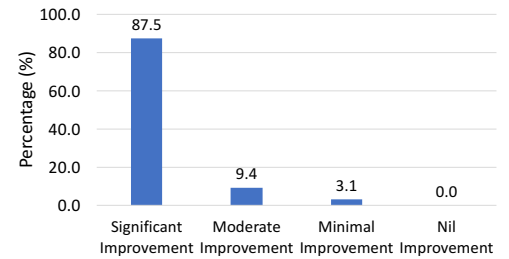


Figure 3: Survey response about perceived impact evening pharmacist had made to T2 workflow

**Nurse: "Extremely helpful to the flow of admission & discharges by extending hours"**

**Pharmacist: "has allowed for better patient care with earlier detection of issues improving medication safety"**

**Registrar: "the effect has been noticeable with less drug errors...and timely discharge scripts and medication provision"**

**Consultant: "additional pharmacy support has been critical to ensure early morning discharges can occur and that discharge prior to midday is possible"**



Figure 4: Feedback from T2 staff

## Implications

This trial demonstrated that an evening pharmacist has increased EMDs allowing for improved patient flow, improved medication safety, staff and patient satisfaction. After this trial we received funding for a permanent 0.5 FTE evening pharmacist. With the addition of a ward-based technician to this area, we are hoping to further improve pharmacy services and the results measured.

**Northern Health**

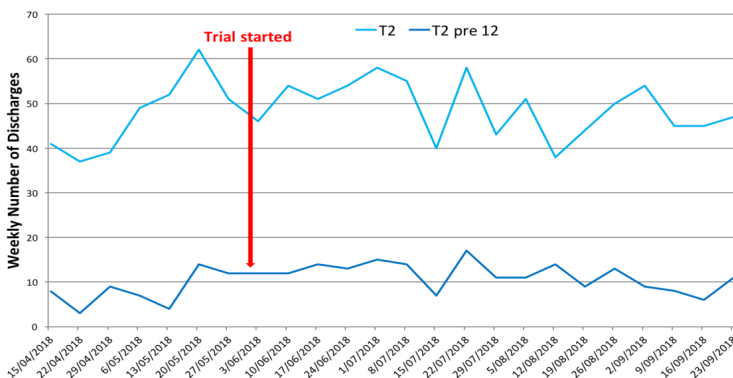


Figure 1. Weekly number of discharges on T2 before 12:00pm and in total