Clinical Redesign - Discharge prescription flow in pharmacy

Camille Boland
Clinical Pharmacy Manager RHH
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Background

Pharmacy services at Royal Hobart Hospital

- Dispensary: pharmacists and pharmacy technicians
- Ward based clinical pharmacists
- Manufacturing: pharmacists and pharmacy technicians
- Pharmacy stores: pharmacy technicians and store staff
- Medicines Information Clinical Trials
More about our roles

**Dispensary pharmacists** rostered to supply inpatient orders and discharge prescriptions. These staff are based in the pharmacy dispensary and Wellington centre outpatient pharmacy.

**Clinical pharmacists** - principal role is to perform duties on the wards with minimal dispensing or supply functions.

Medication safety literature indicates that these ward based activities are important components of reducing medication error – included as criteria in Standard 4 (Medication Safety) of the NSQHS standards.
Clinical pharmacist duties

Clinical Pharmacist duties

- Collection of accurate history of medications taken by the patient on admission
- Review of inpatient medication, advising on dose/drug interactions/therapeutic drug monitoring
- Review of discharge medication/reconciliation.
- Education of patients and carer’s on medications and informing/liaising with other stakeholders of changes to patient’s medication (e.g. community pharmacy packing services)
So what is the issue?

Diversion of clinical pharmacist time from the wards to task of dispensing of discharge prescriptions results in:

- Staff overburden and reduced presence on wards
- Reduced opportunity for review of inpatients and reduced capacity for identification and prevention of medication errors.
What are we interested in?

- Percentage of prescriptions dispensed by clinical pharmacist
- Time in minutes spent by clinical pharmacist in dispensing process (ie. away from clinical duties)
- When does the work arrive
Diagnostic plan

- Obtained support and engagement from pharmacy managers and staff to collect data
- Focus data collection on journey of discharge prescription from arrival into pharmacy to completion of dispensing process & when leaves pharmacy
- Develop tracking tool to track flow of all discharge prescriptions on a standard day through the pharmacy from 8:30 to 5:06pm
- Supplementary survey of clinical pharmacists (survey monkey questions)
Tracking tool

– Begins with arrival of discharge prescription in Pharmacy and ends with when prescription leaves the Pharmacy Department

– Tracks when script arrives, when checked by clinical pharmacist, who actually dispenses the items on the prescription (ie. pharmacist rostered to this task or clinical pharmacist on top of their normal workload)

– When prescription is completed and leaves pharmacy to be delivered to the patient.
Day of audit

STAFFING ON THE DAY OF AUDIT

DISPENSARY PHARMACISTS

– fully staffed for most of the day

CLINICAL PHARMACISTS

– 2 clinical pharmacists away on sick leave
– 1 clinical pharmacist observing and overseeing audit
Results and findings

Discharge prescription using tracking tool was used to collect data on all discharge prescriptions on Wed 26th Feb

34 discharge prescriptions (prescriptions may have several items)

– 44% dispensed by clinical pharmacist (15 out 34)

– Cumulative amount of Clinical Pharmacist time = 305 minutes (5hrs 5min) = 0.67 FTE

– Mean time spent per clinical pharmacist who dispensed their script = 38 minutes (of 8 clinical pharmacists)

– Range of time spent per clinical pharmacist: (14 – 100min)
Results and findings

Flow of discharge scripts into the pharmacy fluctuates throughout the day

– Peak time of arrival of prescriptions (around 24% of all scripts) is between 11am to 12 noon – just before lunch breaks (12 noon to 2pm)

– Number of prescriptions completed between 1pm and 2pm falls off dramatically
When does the work arrive

Note: Peak of arrival just prior to lunch breaks
When is the work completed and by who

Dispensing of prescriptions - when and who completed

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<th>Time of completion of prescription</th>
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Results and findings

Other observations/notes:

– Comparatively speaking a relatively quiet day in the dispensary and dispensary staffing reasonably good

– Auditor noted that often clinical pharmacists were automatically processing their own prescriptions even though there were not scripts waiting in the queue for dispensary pharmacist to do. - ?Why

– Survey monkey emailed to clinical pharmacists re attitudes to processing of discharge prescriptions - replies anonymous
Summary of survey findings

– 21 completed surveys from 26 (81% response rate)

Process Note:

– on arrival of a discharge prescription in pharmacy, the pharmacy is text-paged
– The clinical pharmacist then needs to check/reconcile the discharge prescription and fill in a handover checklist to assist the dispensary staff
– This means returning to pharmacy department to perform this task
Q2: I process and dispense discharge prescriptions for patients under my unit or ward

- Always: 9.5%
- Most of the time: 61.9%
- Sometimes: 14.3%
- Rarely: 14.3%
- Never: 0%
Q3: Before processing my own prescriptions I check with the dispensary staff about their capacity to process discharge prescriptions.
Summary of survey findings

Main themes:

- Clinical pharmacists are regularly spending time off ward duties to dispense discharge prescriptions

- Capacity of dispensary staff rostered to dispensing not routinely checked – this appears to be the prevailing mindset
Summary of survey findings

Digging a little deeper…looking at the comments in the survey

– In order to fill in the dispensary checklist the clinical pharmacist has to physically return to pharmacy to annotate

– This interrupts their ward work – by the time they arrive it is perceived as easier to dispense the prescription themselves, rather than fill in the checklist & return to ward

Other comments: -
– ‘most prescriptions arrive around lunchtime when there are limited dispensary staff to assist’
– ‘usually discharge prescriptions arrive late in the discharge process and this creates an urgency to do myself’
Next steps

- Results have been discussed with Dispensary Manager
- Initial discussion with a few clinical pharmacists
- In near future also plan for group session with clinical pharmacists to present results & brainstorm solutions.
Next steps

Two potential interventions floated with initial discussions:

- Review lunch breaks in the dispensary – eg. stagger breaks, or half hour breaks paired with adjusted arrival/finishing times

- Implement a system of clinical pharmacist checking discharge prescriptions while on the ward - then scan checklist to dispensary – rather than needing to physically return to pharmacy department.
Wrap up

- Data collected so far has provided important information to describe the real reasons why clinical pharmacists are diverted from ward work
- Next steps: developing potential interventions and solutions - requires inclusion of clinical and dispensary pharmacy staff
- Once developed, interventions will require testing and further data collection to measure outcome

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