Mid Cheshire Hospitals NHS FT
Acute Medical Unit - To Take Out Medications Project

Mid Cheshire Hospitals
NHS Foundation Trust

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General Summary

This project is a compelling example of the importance of listening to patient feedback.
Issues with discharge delays trust-wide were identified through patient and public involvement initiatives. The national inpatient survey 2015 had highlighted patient concerns around the lengthy delays when waiting for discharge medication following discharge from inpatient hospital stays. Subsequently a project team led by Amy Chadwick was appointed on AMU to address these delays at a local level, with the view to disseminating and rolling out any successful interventions across other areas of the hospital. By trialling new ideas, and measuring the outcome via PDSA cycles, a robust and sustainable improvement has been implemented. Discharge delays have been significantly reduced since the introduction of the TTO printer on AMU, decreasing the delays associated with the medications aspect of the discharge process and increasing patient satisfaction. This is also being piloted on a surgical ward.

Rationale

The national in-patient survey 2015 highlighted a number of concerns relating to poor experience at the point of discharge. This was largely due to delays in receiving discharge medications. The main challenge being that TTO prescriptions that were being sent to pharmacy lead to long processing times. This resulted in patients having to wait long periods of time for their medications to be dispensed and low levels of patient satisfaction.
The cycle of a TTO begins when the doctor has written the discharge prescription and then submitted this to the Pharmacist for authorisation. Once the TTO has been authorised it can be sent to Pharmacy for dispensing. When the TTO is in Pharmacy it joins the 'queue' of TTO's waiting to be dispensed and checked, along with other items for dispensing such as outpatient prescriptions and inpatient orders. The dispensary aims to achieve a two-hour turnaround time on all TTOs however this can be delayed depending on the volume of prescriptions being sent to Pharmacy and the staffing levels.
The aim of this initiative was to bypass the dispensary completely and dispense the TTOs on the ward using available ward stock medications. This was made possible as there is a regular ward Pharmacist and Pharmacy technician on AMU who are able to dispense and check TTOs once the TTO has been authorised. This has reduced waiting times significantly from hours to minutes in some cases.

Planning

Having recognised the issues arising from an ineffective discharge process in relation to tablets to take home (TTO'S), the Acute Medical Unit (AMU), in conjunction with the units' Pharmacist, undertook a project to improve the TTO process to benefit patients' experiences, reduce waiting times and to improve patient flow. A project group was established, it was important that the project group was agile with the ability to make rapid decisions regarding the project and therefore the group included the ward manager, house keeper, ward pharmacist and pharmacy technician. The group met weekly so changes could be made quickly, to ensure total success of the project. In order to support the change process the group adopted the Plan Do Study Act (PDSA) quality

improvement method to rapidly implement and test the changes. The group was clear about what was being measured and by whom, with the clear aim for the project being to reduce the time patients waited for TTO's, improve patients experience as well improve patient flow through the unit.

Impact

The discharge process was improved in four phases.
Phase 1 – Baseline data collection: A comprehensive baseline data collection was undertaken to understand the discharge process in relation to TTO dispensing. Every step was timed so that any inefficiency could be identified, reviewed and improved without compromising safety.
Phase 2 – Introduction of a pharmacy TTO labelling dispenser and data collection. The comprehensive data collection tool was subsequently used to establish the efficiency of the printer. The data collected included the time it took to process a TTO on the ward vs. the time it took to process a TTO when it was sent down to Pharmacy. The timings that were measured included:

- The time difference between booking in and booking out of Pharmacy
- The time difference between authorisation and booking in

Phase 3 - Review of the collected data and patient complaints/friends and family feedback results. The TTO data was reviewed by the AMU pharmacist on a regular basis, specifically whether there were TTOs that had been sent to the dispensary because they could not be processed on the ward. The main reasons as to why some TTOs had to be sent down to dispensary:

- Items on the TTO were not stocked on the ward
- Not enough stock on the ward to fulfil the prescription
- No technician or Pharmacist on the ward (due to dispensary commitments) as two members of pharmacy are needed to process the TTO (to dispense and accuracy check)
- Dispensing computer unavailable as being used by another staff member

Phase 4 – Sharing of the results. Results have been presented at various forums within the trust, highlighting the benefits to both the ward and patients. The number of concerns raised via the customer care team regarding medication generally from AMU has reduced since 2015. Number of concerns raised through the customer care team in relation to medications on AMU.
Years to date: 2015/2016 = 15; 2016/2017 = 10; 2017/2018 = 01. This data in conjunction with the audit data shows a significant improvement in the discharge and pharmacy dispensing process on AMU.

Before

total "Yes"	13
total Number of TTOs	25

% of TTOs that could have been dispensed on the ward = 52%

Mean time (mins)	129
Maximum time (mins)	385
Minimum time (mins)	40

After

total "Y"	60
total No's	17

% of TTOs have been dispensed on the ward = 71.6 %

TTo's dispensed on AMU	
Mean time (mins)	15
Maximum time (mins)	48
Minimum time (mins)	2

TTO's sent to Pharmacy	
Mean time (mins)	90
Maximum time (mins)	204
Minimum time (mins)	23

Relevance to Others

This initiative has been piloted on a busy acute medical unit and has proven to reduce medication waiting times as well as an increase in patient satisfaction around the discharge process. There are plans to roll out similar initiatives in other areas across the organisation, and this is currently being piloted on a surgical ward.

Standing Out

This is a compelling example of how a project team can work together to achieve real tangible improvement for patients. By reviewing current practice and thinking innovatively about how we can do things differently to improve patient experience, the team have successfully implemented a project which offers real sustainable benefits. These benefits include reducing waiting times, length of stay as well as improve patient flow and increase patient satisfaction.

Key Learning Points

- One of the key learning points from this initiative was ensuring communication within the project team. This was done both on an ad-hoc basis on the ward and during organised project group meetings to discuss any developments or challenges encountered.
- Another key point pivotal to the success of the project was the presence of at least two Pharmacy members – a Pharmacist to clinical authorise the TTO and a Pharmacy technician to accuracy check and/or dispense the TTO.
- Using the PDSA cycle fostered ownership of change by the team and ward staff, which led to full engagement in the project. Staff could see the benefits during the pilot phase and were encouraged to provide feedback on a daily basis as to what went well and what could have gone better.
- The measurement of data was critical to the success of this project. Staff could see the tangible benefits of the interventions, which was both motivating and empowering.