DEDICATED WARD PHARMACY PILOT – EAST LANCASHIRE NHS FOUNDATION TRUST

SUMMARY

From January 2016 four medical wards at the Royal Blackburn Hospital were each allocated a dedicated pharmacist with no other commitments other than to their ward; an increased pharmacy technician presence was also provided.

The pharmacists took part in the daily multi-disciplinary consultant-led ward round, and the technicians focused on medicines reconciliation and discharge planning including creating the medicines sections of the patients' discharge letters.

The impact on patient outcomes were measured and it was: a decreased length of stay, reduced re-admissions, reduced drug expenditure, earlier in the day discharges, improved medicines reconciliation, improved transfer of care, improved medicines safety, and improved staff and patient experience.

ABOUT THE PROJECT

The challenge and context

Medical wards are often populated with a high proportion of patients with long term conditions and often high level of frailty. These patients often have complex medicines profiles which, when out of balance, results in complications and discharge delays.

The project objective was to demonstrate the impact of an 'optimised' ward pharmacy service, and then create an irrefutable set of arguments to allow spread of the service to each ward in East Lancashire Hospitals NHS Trust.

Approach

Understand and demonstrate what the pharmacy service can deliver with an increased level of resource on wards via:
- Creating auto reports tracking various performance indicators: length of stay, readmissions, time of discharge, medicines reconciliation, completion rate of electronic discharge letters.
- Carry out an intensive period of recording and analysing of pharmacy interventions.
- Produce a business case to demonstrate the cost-positive nature of the outcomes.
- Convince the trust to front-load funding for a roll out of the service.

Main elements of the project

- Pharmacists and pharmacy technicians from the pharmacy directorate to deliver the ward based service.
- Trust Informatics department to develop robust reporting tools.

- Senior management to sanction the pilot, the subsequently help with the creation of the business case and process it through the correct channels

CHALLENGES, ENABLERS AND OUTCOMES

Challenges

- Creating buy in to invest in the expansion of the service – This was actually the third time this service has been piloted in three years. The first project looked just at improving patient flow, which it demonstrably did but there was no funding identified to spread this. The idea did not go away so a second two-month long pilot was given the go-ahead, in May 2015, looking at patient flow and other quality and fiscal indicators. This produced even better outcomes, which led to the trust's new medical director being persuaded to expand the scope of the pilot.
- Engaging the right people – Local decision makers were won over by involving senior managers from the outset and keeping these people regularly apprised of progress during the data collection period, and then again during the writing of the subsequent business case.
- Recruiting an extra two pharmacists to enable the pilot – This took time due to normal recruitment lags and notice periods.
- Creating robust reporting tools – It took time and many iterations to ensure that these were fit for purpose.
- Demonstrating value – Interpreting all the pharmacy interventions and apportioning a value to these took a lot of time commitment.

Enablers

- Commitment to the project – Persistence and a burning desire from the pharmacy team to demonstrate their full capabilities.
- Appropriate workforce deployment – Choosing the right skill mix from the pharmacy staff available to be the main deliverers of the pilot work.
- Picking a variety of ward types to demonstrate transferability of the service.
- Good communication – Regular PDSA meetings and de-briefings with the pharmacy team providing the service to ensure the correct focus was maintained to achieve the desired outcomes.
- Streamlined processes – Creating an SOP to allow pharmacy technicians to draft the medicines elements of discharge letters.
- Capturing feedback – Ward staff (doctors, nurses, pharmacists and pharmacy technicians) and patients were asked to complete specific feedback surveys to capture opinions of the service.

Success measures

- Length of stay (LoS). Two measures were used: LoS at midnight, and notional beds released by the reduction in LoS. In comparative wards the ward average LoS at midnight decreased by 1.3 days; notional beds released over a year was approximately 2.5/ward. This was attributed to the nature and quality of the pharmacy interventions.
- Re-admissions rate. We examined readmissions for the same diagnosis at 7, 14 and 28 days and compared it to pre-pilot performance. The 7-day average for all four wards fell from 4% to 0% (N=468); the 14-day average fell from 8% to 1% (N=375); the 28-day average fell from 13% to 3% (N=334). This was attributed to the pharmacy interventions and ensuring each eligible patient was referred to their community pharmacist for further post-discharge support with their medicines using the Refer-to-Pharmacy system www.elht.nhs.uk/refer

- Time of discharge. We decided to focus on the time the patient left the building rather than discharge prescription turnaround times. The latter became irrelevant as medicine supplies were made well in advanced of the planned discharge, and the creation of the discharge letter was similarly managed. Historically the pharmacy service is 'blamed' for delayed discharges, as the service would typically be forced into an end of process rate limiting step. In this pilot the flow of work was re-ordered. We found a 9% increase in patients being discharged before lunchtime, and a 66% decrease in patients being discharged after 6pm.
- Medicines Reconciliation. The trust has an electronic patient tracking system, which captures live data on every medicines reconciliation intervention. 91% of patients had their drug histories confirmed and fully reconciled by the pharmacy team compared to a Trust average of 53%.
- Drug expenditure. As a result of analysing pharmacy interventions it was determined that for the 4 wards (93 beds) there was a £67,558 annualised saving on medicine costs.
- Completion rate of e-discharge letters. 98% of patients in the pilot wards had their discharge letter completed before they actually left the hospital compared with a trust average of 88%.

Key lessons

- It is cost effective to have an increased level of pharmacy presence on wards with pharmacists focusing on ensuring effective prescribing decisions and medicines safety; and technicians focusing on transfer of care. The increase pharmacy resources leads to patients getting better, faster, not being re-admitted to hospital and a decrease in the expenditure on medicines.
- Start with a larger pilot so the data is even more compelling. As mentioned there were two single ward pilots which led to the four ward approach.
- Incorporate learning from other organisations. Get in touch to discuss tactics, so we can describe effective practice and what reporting tools to consider generating.

Next steps

- Create a mechanism to rapidly induct new staff into this way of working so as more wards are turned on the new staff achieve the desired outcomes immediately.
- We would like to measure the effect on patient transport services – are we seeing a decrease in cost of these as more journeys are completed in normal working hours.
- We would also like to examine if the value to the trust of higher quality records leads to more effective clinical coding; and if not, what needs to change to affect this.
- We would also like to explore what research opportunities exist and will explore these with local academic partners (there are two schools of pharmacy nearby)
- Create an effective communications campaign to let other trusts know what we have found so the model can be replicated elsewhere.

It is envisaged that if funding is granted then ward pharmacy services will continue to grow based upon the success of the dedicated ward pharmacy model. The most obvious being the pharmacist or pharmacy technician becoming one of the coordinators of discharge planning activities – which appears to have naturally occurred on all the pilot wards where the pharmacist becomes the hub of this activity. Other examples may include pharmacy technicians administering medicines, non-medical prescribing (NMP) pharmacists actively managing patients' conditions and independently adjusting regimens where appropriate e.g. dose adjustment in renal/hepatic impairment or in response to therapeutic drug monitoring, or medication review in view of swallowing difficulties, enteral tube

administration or NBM status. As in ED independent non-medical prescribing pharmacists could also gain advanced practitioner skills such as cannulation and clinical assessment and observation skills to build upon their baseline knowledge gained from their NMP training. There is also scope for independent non-medical prescribing pharmacists to write discharge letters in their entirety should the quality of documentation in medical notes meet an appropriate standard to facilitate an accurate and complete transfer of care at the point of discharge planning

FOR FURTHER INFORMATION PLEASE CONTACT

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