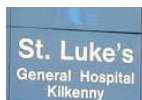


(GPI) Discharge Management: Safer Discharges and Improved Information Transfer Metrics

Authors: Ms. Marie-Claire Jago-Byrne, Chief Pharmacist NGH; Ms. Sinead McCool, Senior Pharmacist, St. Luke's Kilkenny; Prof. Stephen Byrne, UCC; Mr. Cian O'Mahony, UCC; Ms. Aisling Stack, UCC; Ms. Muriel Pate, Senior Pharmacist NGH; Ms. Fiona Ryan, Senior Pharmacist, SLK;



1 WHAT WAS DONE?

The aim of this project was to improve medication safety at the point of hospital discharge by using targeted medication reconciliation and producing a computer-generated prescription. This new model for discharge prescribing was introduced for patients who met both of the following criteria in two acute hospitals:

- Prescribed 9 or more medications, at the time of admission
- Aged 70 years and over

enhanced safer better improved workflow communication medicines reconciliation care eDischarge prescribing

2 WHY WAS IT DONE?

Published research had demonstrated that 50% of discharge prescriptions were non-reconciled¹. A recent study demonstrated that 43% of patients experienced post-discharge medication errors². The prevalence of polypharmacy (>5 medications) has increased over the 15 years to 2012, from 17.8% to 60.4% in people 65 years and older in Ireland³.

3 HOW WAS IT DONE?

The new model for discharge prescribing used collaborative medication reconciliation and the e-Discharge software to improve the quality of discharge prescriptions. The model was introduced in both hospital sites and received support from community and hospital colleagues. Clinical pharmacists became the project champions and worked closely with medics during the change process.

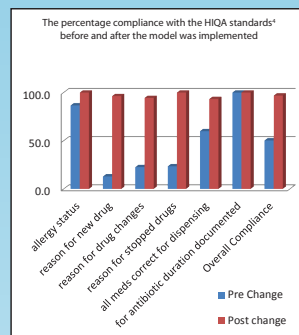
Key safety aspects of the new model were:

- Clinical double check for this high-risk process- the pharmacist and the doctor sign the prescription
- Increased legibility
- Explanation for all prescription changes to GPs and Community Pharmacy colleagues

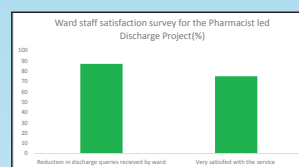
4 WHAT HAS BEEN ACHIEVED?

Phase 1:

The overall compliance with the national discharge prescription standards increased from 50.4% to 96.9% with the new model of discharge prescribing. The biggest change in percentage compliance was observed in the three communication categories, which explain to community healthcare providers the rationale behind the medication changes made during the hospital stay.



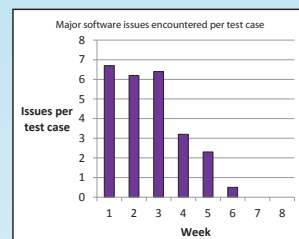
A user acceptability survey of HCP's involved in the project demonstrated that all those involved had benefited from improved workflows in hospital and community settings, and more appropriate and efficient use of resources. All users requested expansion of this service.



Phase 2:

The e-Discharge software was further tested on 300 test cases in a bench top exercise. This review allowed for the improvement of the previously piloted e-Discharge Software using anonymised patient cases to test issues identified in phase 1.

- Examine and validate the eDischarge medicine reconciliation software implementing any changes required to ensure patient safety
- Optimise the eDischarge Software user experience



5 WHAT NEXT?

Phase 3:

- February 2017: An additional 60 patient e-discharges completed validating improvement, integrity and robustness of the programme
- March 2017: Publication of the Health Information and Quality Authority Inspection report⁵ for Naas General hospital, where the development of the e-Discharge med rec program was acknowledged as part of the ongoing medication safety agenda
- Business cases in progress for additional clinical pharmacy staff and service expansion
- Potential for this model for discharge prescribing to be used in other hospitals and currently under review by eHealth Ireland



References:

1. Grimes TC, Duggan CA, Delaney TP, Graham IM, Conlon KC, Deasy E, Jago Byrne MC, O'Brien P. Medication details documented on hospital discharge: cross sectional observational study of factors associated with medication non reconciliation. *British journal of clinical pharmacology*. 2011 Mar 1;71(3):449-57.
2. O'Riordan, C., Delaney, T. and Grimes, T., 2016. Exploring discharge prescribing errors and their propagation post-discharge: an observational study. *International Journal of Clinical Pharmacy*, pp.1-10.
3. Moriarty, F., Hardy, C., Bennett, K., Smith, S.M. and Fahey, T., 2015. Trends and interaction of polypharmacy and potentially inappropriate prescribing in primary care over 15 years in Ireland: a repeated cross-sectional study. *BMJ open*, 5(9), p.e008656.
4. HIQA (2013). National Standard for Patient Discharge Summary Information. www.HIQA.ie
5. <https://www.hiqa.ie/system/files/file=inspectionreports/naas-general-hospital-29-november-2016.pdf>