Improving the quality of medicine reconciliation in a medical admissions unit
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Background
Medicines reconciliation (MR) reduces patient harm from medicines across the transitions of care.\textsuperscript{1,2}
MR ensures that patients are prescribed the correct medicines, at the correct doses appropriate for their current clinical presentation.

Aim
To reduce patient harm from medicines and support safe transition of care as part of the 2020 vision, the aim of this Multidisciplinary Quality Improvement (QI) project was that 80% of patients admitted to the medical admissions unit will have their medicines reconciled to inform the accuracy of the inpatient prescription chart by November 2017.

Objectives

- Describe the current MR process
- Identify the barriers to the process
- Design and apply test of changes to the process
- Analyse process and outcome measures for improvement

Methods

Understanding the system
- Process map to identify current MR process
- Staff questionnaires to identify barriers to MR process

Develop aim and change theory
- Driver diagram to inform small tests of change

Intervention
- Application of PDSA cycles, data collection - process and outcome measures (5 patients per week)

Effects of changes
- Run charts to analyse process and outcome measures for improvement

Results

Five patients were followed from point of hospital admission to transfer into an inpatient ward to inform the process map and gain an understanding of the paperlite MR process. Results of questionnaires (n=9) and the process map informed the Ishikawa diagram (figure 1) and the driver diagram. The driver diagram was used to generate change ideas.

Time taken for MR and lack of knowledge of the current paperlite process were common barriers and each test of change (ToC) was designed to address these barriers.

A new short code (1\textsuperscript{st} ToC) to electronically document MR was proposed and agreed by prescribers. Printing of the Emergency Care Summary (ECS) by administrators (2\textsuperscript{nd} ToC) failed due to issues with administrators documenting patient consent. An infographic (3\textsuperscript{rd} ToC) was circulated to make the process more visual and to improve knowledge of the MR process by prescribers. Accuracy of prescription charts at point of hospital admission (outcome measure) improved from 40% to 80% (Mar – Nov 17) (figure 2).

Conclusion

The MR process is complex, particularly in a paperlite environment. The multidisciplinary project team (doctors, physiotherapist/QI facilitator and pharmacist) worked together and each profession brought different strengths. Staff engagement in the project was key to its success. This project demonstrated the successful use of QI methodology to improve accuracy of inpatient prescriptions across transitions of care to reduce patient harm. Next steps are to retry administration staff to print ECS as the next PDSA cycle.

References