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A pilot study of hospital prescribing error feedback by pharmacist

Introduction

The National Patient Safety Association (NPSA) receive 150,000 annual reports of patient harm through prescribing errors[1] many of which occur in hospital[2]. Prescribers are often unaware of their error(s) and it is suggested individualized feedback may reduce overall prescribing error rates. Processes to deliver this feedback in hospital practice are not yet established. The aim of this study was to agree and test a feedback process from pharmacists to hospital prescribers.

Objectives

Establish multidisciplinary consensus on process(es) used to deliver feedback to prescribers. Agree on tools used to prioritise errors for feedback. Test and evaluate the implementation of this process.

Method

The study pilot was conducted in a medical ward of a large teaching hospital during January 2014 to July 2014. A mix method approach using a focus group (qualitative) and a survey questionnaire (quantitative) evaluated the process. Participants were purposively selected and recruited into the study. Out of the five acute medicine physician teams only three would participate in the study. It was agreed to test two processes (figure 1). For the 'team' group, weekly reports were emailed to the consultant for dissemination to individual prescribers illustrating errors and their severity. For the 'individual' group, prescribers were informed directly by the pharmacist by email. Both study groups received feedback only on prescribing errors rated 'red' or 'amber'.

Figure 1 Overview of project methodology
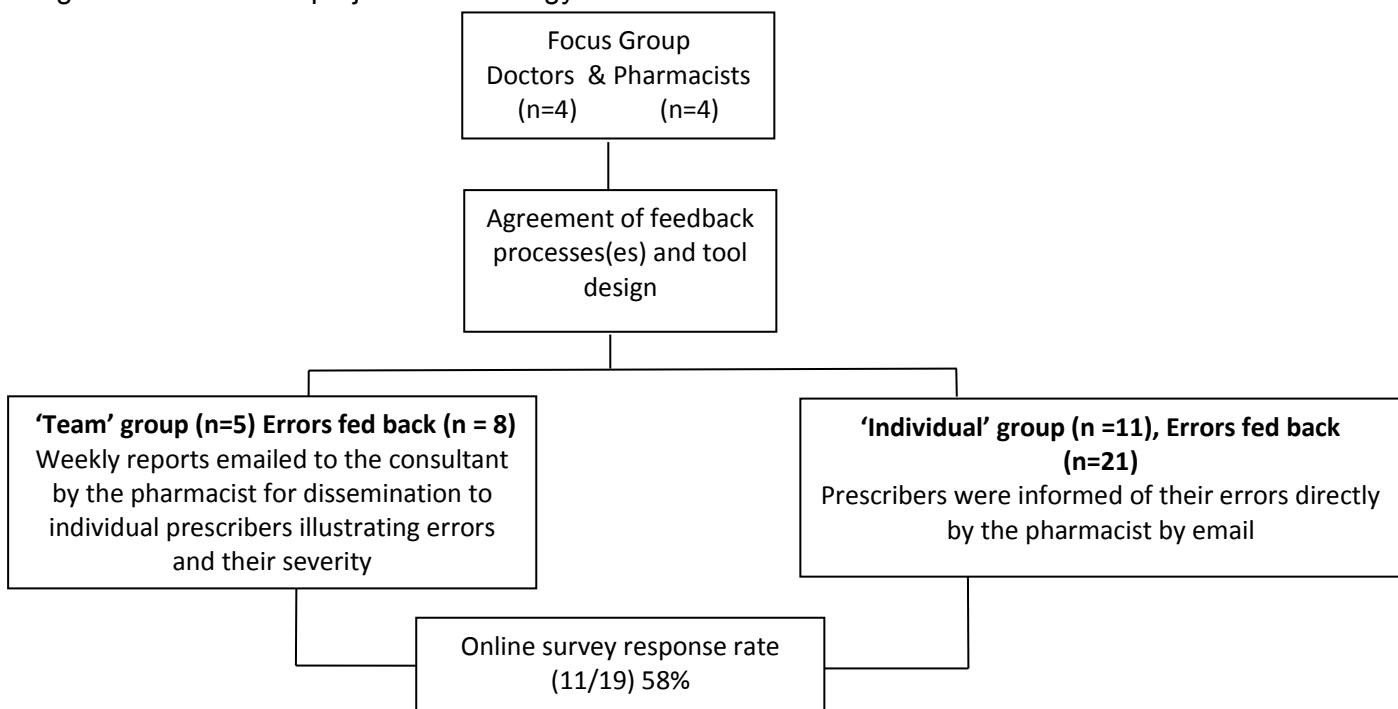
The proposed tools for piloting the processes were agreed by the focus group. The severity error tool was developed by amalgamation of published guidance from United Kingdom Medicine Information (UKMi)/ (NPSA) and Medicines Health and Regulatory Agency (MHRA)[3,4] by the project team. It categorises error severity into risk; 'red' serious (n=7), 'amber' moderate (n=22) and 'green' negligible (n=8). An online survey questionnaire, to

establish the views of the study participants on the piloted prescribing error feedback process, was developed and validated for face and content validity by the project team. The online survey tool was piloted in junior doctors (n=2) and resulted in minor modifications. The survey was sent to all 19 study participants (Team group (n=2), Individual group (n=11), Consultant (n=2), Pharmacist (n=2)) involved in either receiving or delivering feedback. NHS research ethics approval was not necessary.

Results
Error feedback:
Thirty seven prescribing errors by 16 prescribers were documented over 6 weeks. Red and amber errors (n=29) were fed back to prescribers. Survey response rate was 58% (n=11) (figure 1) with opinions from pharmacists (n =2) and doctors (n=17).

Doctors views:
Doctors (n=4) were receptive to the email feedback method, *(D1)* '*easier to reflect on an error outside the busy ward environment'.* Three prescribers preferred alternative feedback methods.Consultants (n=2) perceived the email feedback method as having '*a strong impact on patient safety (C1)'* but recognized its limitations, 'face *to face feedback has more impact but I appreciate the potential time restraints in relation to this (C1)'.*

Pharmacists (n=2) views:
Pharmacists preferred verbal one to one feedback methods. Opinion on delivery of feedback was mixed with no definitive preference for the 'team' or 'individual' approach.

Discussion/Conclusion
The preferred method of providing feedback to prescribers was one to one verbal by the pharmacist. The study confirmed that prescribers were receptive to a range of feedback methods to learn from their prescribing errors. Where one to one verbal feedback was reported as a preferred method, resource limitation to implement this was acknowledged. Future considerations should aim to combine individual and team based feedback in a multifaceted toolkit to allow acceptability among hospital prescribers and pharmacists to be established. Strengths of the study were the inclusion of a broad range of prescribers and the lack of potential bias from the project investigator (who was not involved in data collection). Study limitations include small numbers of participants at a single hospital site, no direct comparison of methods as prescribers were not exposed to both.

References

1. National Patient Safety Agency. *'National Reporting and Learning System Quarterly Data workbook up to Dec 2013'.* [homepage on the Internet]. London: NHS; 2014 [updated 2014 April 29; cited 2014 Oct 4th]. Available from: http://www.nrls.npsa.nhs.uk/resources/collections/quarterly-data-summaries/?entryid45=135253.
2. Dornan T, Ashcroft D, Heathfield H, Lewis P, Miles J, Taylor D, et al. An in depth investigation into causes of prescribing errors by foundation trainees in relation to their medical education—EQUIP study. *London: General Medical Council.* 2009; :1-215.
3. National Patient Safety Agency, UK Medicines Information. *'NPSA Rapid Response Report: Reducing harm from omitted and delayed medicines in hospital. A tool to support implementation.'.* [homepage on the Internet]. London: UKMi; 2014 [updated August; cited 2014 Feb]. Available from: http://www.ukmi.nhs.uk/filestore/ukmiaps/RRR09-UKMItool.pdf.
4. Medicines and Healthcare Products Regulatory Agency. *' A Guide to Defective Medicinal Products'.* [homepage on the Internet]. London: Medicines and Healthcare Products Regulatory Agency; 2014 [updated March 6th; cited 2014 Feb 2nd]. Available from: http://www.mhra.gov.uk/home/groups/is-lic/documents/publication/con007572.pdf.