

Evaluation of the Medicines Management Team's Effect on Reducing Medication Related Patient Harm and Improving Medication Related Patient Safety

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Introduction

Clinical Commissioning Group (CCG) employed pharmacists have historically focussed on cost saving work. However, the clinical role of the Medicines Management Team (MMT) is evolving and becoming increasingly more involved in improving medication safety and reducing the risk of medication related harm.

This review evaluates the prescribing interventions made by the MMT outside of prescribing audit work using a bespoke database and peer reviewed case law to grade their severity and considers their use in directing future work for the MMT. Examples of work included in the database are: medication queries, medication review clinics, care home medication reviews, PINCER prescribing safety indicators¹.

During the evaluation time period the MMT comprised of: Pharmaceutical Advisors 0.84 full time equivalent (FTE), Primary Care Pharmacists - 1.85 FTE, Pharmacy Technician - 0.87 FTE.

Definitions used

Medication error is a failure in the treatment process that leads to, or has the potential to lead to, harm to the patient."²

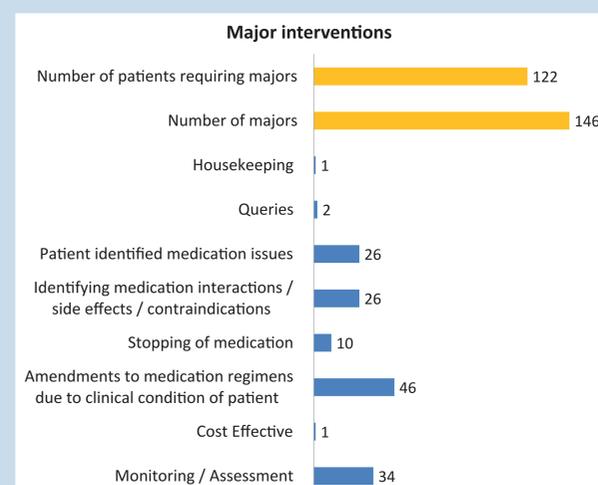
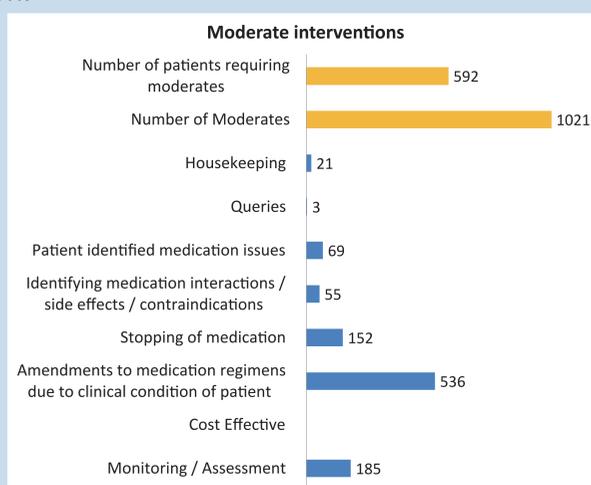
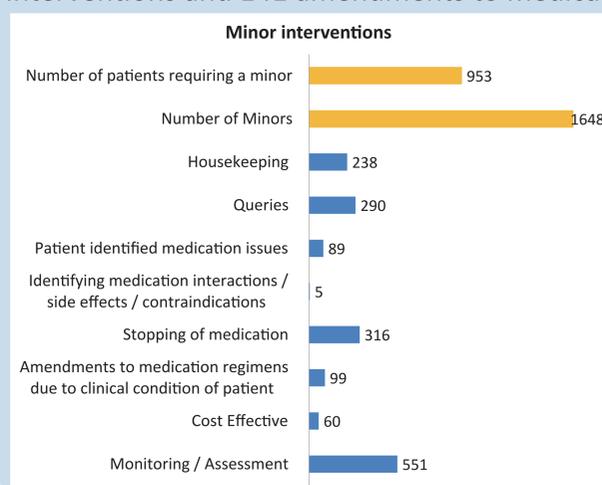
Major intervention – Any intervention identified in the treatment process that **is/has** caused harm and/or resulted in reduced compliance and/or effectiveness of the patient's treatment, and as a consequence should result in a change to their clinical management subject to patient and/or GP consent.

Moderate - Any intervention identified in the treatment process that has the **potential** to lead to harm and/or reduce compliance and/or effectiveness of the patient's treatment, and as a consequence should result in a change to their clinical management subject to patient and/or GP.

Minor - Any intervention that is **unlikely** to have resulted in harm and/or reduce compliance and/or effectiveness of the patient's treatment but may result in a change to their clinical management for either cost-effective purposes or changes which are deemed more acceptable to the patient.

Results

Between 1st March 2012 to 31st December 2014 there were 2,815 interventions made on 1,246 patients. These interventions also generated approximately £35,000 worth of savings. Care home medication reviews resulted in the largest number of interventions (1756 on 634 patients). PINCER safety indicators were run twice during this time period, 708 patients were reviewed by the indicators resulting in 145 monitoring related interventions and 141 amendments to medication.



Impact of the results

The results have helped to evidence that the MMT provide a service in primary care that far exceeds a cost saving role. The interventions have been graded against case law to allow the interventions to be thematically screened to identify educational gaps and high risk medication errors. This has helped to support a number of changes to the MMT including:

- Expanding the MMT team
- Recruitment of a specialist care homes pharmacist
- Continued collaboration with the University of Nottingham around the PINCER indicators
- Continued development of a clinical role for the MMT

References

1. Avery A et al. Pharmacist-led information technology-enabled intervention for reducing medication errors: multicentre cluster randomised controlled trial and cost-effectiveness analysis (PINCER Trial). *Lancet* 2012; 379: 1310–1319.
2. Ferner RE and Aronson JK. Clarification of Terminology in Medication Errors. *Drug Safety* 2006; 29(11): 1011-1022.

Conclusion

- The MMT made a variety of interventions over a range of clinical scenarios.
- The variability between practices relates to the type of work the pharmacist was doing in each practice during the evaluation period, as this was not standardised.
- The results suggest that the greater the clinical role the MMT has with a GP practice then the more interventions can be made.
- Pharmacists can potentially reduce patient harm and increase prescribing safety.
- There is a time impact to using the database and therefore acknowledgement that under-reporting is highly likely.
- Developing a peer reviewed case law has been very useful.
- The team have continued to record interventions using the database and ideally the current excel database would be replaced with a more time efficient option.