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RESEARCH PAPER

Partnered medication review and charting between the pharmacist and medical officer in the Emergency Short Stay and General Medicine Unit

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Summary
Objective: A partnered medication review and charting model involving a pharmacist and medical officer was implemented in the Emergency Short Stay Unit and General Medicine Unit of a major tertiary hospital. The aim of the study was to describe the safety and effectiveness of partnered medication charting in this setting.
Methods: A partnered medication review and charting model was developed. Credentialed pharmacists charted pre-admission medications and venous thromboembolism prophylaxis in collaboration with the admitting medical officer. The pharmacist subsequently had a clinical discussion with the treating nurse regarding the medication management plan for the patient. A prospective audit was undertaken of all patients from the initiation of the service.

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Results: A total of 549 patients had medications charted by a pharmacist from the 14th of November 2012 to the 30th of April 2013. A total of 4765 medications were charted by pharmacists with 7 identified errors, corresponding to an error rate of 1.47 per 1000 medications charted.
Conclusions: Partnered medication review and charting by a pharmacist in the Emergency Short Stay and General Medicine unit is achievable, safe and effective. Benefits from the model extend beyond the pharmacist charting the medications, with clinical value added to the admission process through early collaboration with the medical officer. Further research is required to provide evidence to further support this collaborative model.

What is known

- Previous studies in this area emphasise the growing impact of the pharmacist when involved earlier in the medication review and prescribing process.

What this paper adds?

- Our model differs to previously published models in that it is a partnered medication review and charting program, where the pharmacist and medical officer have a face-to-face clinical discussion for every patient, ensuring pre-admission medications are considered early and allowing pharmacist input into prescribing for acute conditions, new therapies, changes to chronic medication regimens, and medication-related investigations, adding clinical value to medication charting for complex patients requiring hospital admission.

Introduction

Access block and increasing demand has resulted in Emergency Department (ED) overcrowding.[1] There is a strong association between ED congestion and delays to essential treatment and worse outcomes.[2,3] In Australia, recent imposition of the National Emergency Access Targets (NEAT) has encouraged hospitals to improve patient flow.[1] Within The Alfred, a whole-of-hospital service redesign, known as Total Quality Care (TQC), was implemented in November 2012 to improve the efficiency of assessment, quality of care and disposition from hospital for all presentations. An essential design element of TQC was for patients presenting to the ED to have mandatory early review by experienced medical staff who could rapidly implement an appropriate management plan. A key component of this early review was to ensure the availability of an accurate medication history, allowing decisions relating to appropriateness of medications and their contribution to the presenting complaint to be assessed early. Consequently, it was imperative that a model was implemented to ensure this occurred soon after patient attendance. The importance of early clinical pharmacist involvement and collaboration with the medical and nursing staff in this model was highlighted.

Medication errors are among the most common incidents reported in hospitals.[4,5] Medication reconciliation is the process of obtaining a complete and accurate list of medications taken by the patient and is commonly performed at any point where there is a transition in the patient's care,[6] and medication review involves a systematic assessment of the patient's medication management to optimise patient outcomes.[4,7] Clinical pharmacy services in the hospital setting have traditionally focused on accurate medication history taking and reconciliation, then medication order review and discharge medication review.[8] Pharmacist review of medications is usually provided after patient admission and most frequently following significant delay, with errors being fixed retrospectively and potentially after the error has reached the patient.

The Alfred Hospital is an adult major referral hospital in metropolitan Melbourne, Victoria, Australia, with an annual ED attendance of approximately 60,000 patients. The GMU receives approximately 4500 admissions per annum, predominantly through the ED and mostly of elderly patients with complex co-morbidities and polypharmacy. Pharmacy services at our institution are well established and include daily (including weekend) medication history taking and review as well as attendance on interdisciplinary ward rounds on weekdays. In this setting, there was opportunity to develop more advanced clinical roles for pharmacists in the ED and GMU through a model of early medication review and charting on admission involving a partnership between a pharmacist and a medical officer. It was hypothesised this would facilitate early identification and management of medication related problems, appropriate charting of pre-admission medications and improved communication between the pharmacist, medical officer and nurse regarding the medication management plan. It was also hypothesised that the clinical discussion between the pharmacist and nurse would ensure that the nurse was aware of the medication plan and would facilitate early administration of time-critical medications.

VTE is common and associated with substantial morbidity and mortality.[9] In hospitalised patients it has been widely acknowledged as a major opportunity to improve patient safety.[10–12] It was decided during the development of the partnered medication review and charting model to incorporate VTE risk assessment and charting of VTE prophylaxis into the model as a recent Australian study evaluated the role of pharmacist prescribing of VTE prophylaxis as part of a multidisciplinary approach to care in a surgical pre-admission clinic[13] and found that the initiative saved clinician time and