Pharmacists in the Emergency Department

The addition of a clinical pharmacist to a hospital’s emergency department (ED) team is a relatively new concept. Although pharmacists have been providing clinical services to inpatients in hospital wards for years, the emergency medicine setting has only recently been recognised as an area where pharmacist involvement delivers positive outcomes.

The benefits come from the pharmacist:

- facilitating early assessment of medication for patients presenting to the ED;
- identifying potential medication-related problems; and
- conducting medication reconciliation.

The medication reconciliation process involves taking a medication history and confirming the information obtained, through liaison with the patient’s family or carer, doctor(s), community pharmacy, and the accurate identification of medicines brought into the hospital with the patient.

Problems associated with lack of medication reconciliation at admission have been well documented. Cornish et al. found that 53.6% of patients had at least one unintended discrepancy between their admission medication orders and their medication history obtained at interview, with 38.6% of these judged to cause moderate or severe discomfort or clinical deterioration. The potential for such errors in the ED is significant.

Although studies in Australian public hospitals have demonstrated reduced medication errors as a result of ED pharmacist involvement, there is little local information on the cost benefits of this error reduction. A 2009 analysis of UK data found that medication reconciliation in the ED was cost-effective with pharmacist-led reconciliation producing the highest net benefit. Support for pharmacists as the preferred professional for medication reconciliation is provided by Nester et al. who found that pharmacists were more skilled in this area, taking less time and obtaining more accurate medication histories than other health professionals.

The demonstrated benefits in safety and continuity of care provided by an ED pharmacist have led several private hospitals to implement such a service.
For the past two years, both The Wesley Hospital (Qld) and Cabrini Hospital (Vic) have had a dedicated ED pharmacist working in the ED. In these hospitals the approach to ED patient care utilises the pharmacist to take the patient’s medication history and conduct a medication reconciliation, which is then used by doctors to prescribe for the patient on admission. The pharmacist also provides other non patient-specific services to the unit, such as drug information, assistance with drug protocol development and ED projects.

Both sites report that the service has been well received by medical and nursing staff, prompting requests for an expansion of the service to include weekends. The pharmacists involved report increased professional satisfaction from being a part of the ED team.

Similar outcomes to those achieved by the ED pharmacist are being delivered through the inclusion of a full-time clinical pharmacist to the Day of Stay Admission (DOSA) Unit at both The Wesley and Cabrini. In the DOSA setting, patients are admitted on the morning of their scheduled surgery, and are interviewed by the pharmacist regarding their medication use. The information collated by the pharmacist, in the form of medication reconciliation, is then used by the anaesthetist to consider when writing up medication orders.

The Wesley reports that the ED and DOSA pharmacists are able to complete medication reconciliations for large percentage of patients, at the point of admission. This has significantly reduced the incidence of discrepancies between a patient’s inpatient medication and the medications taken before admission. Of further benefit, is that medication can be dispensed by pharmacists faster when a clear and complete medication order is available.

The cost benefits of such services are more difficult to quantify, but factors such as improved utilisation of the PBS and identification of non-admission-related and discharge medication have been noted.

Aside from the obvious benefits for the patient, these services support nurses and doctors and allow them to attend to other patient care activities. It also supports the ward pharmacist in managing inpatient pharmaceutical care, and assists in maintaining the continuum of care as patients move from hospital to the community.

*References available on request.*

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