

## Pharmacy services delivered at admission to and discharge from hospital

### The Evidence Base – An overview

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Adverse events experienced by patients at discharge from hospital are commonly related to medication use<sup>(1-4)</sup>. Approximately one third of adverse drug events occurring around the discharge period are the result of error<sup>(3)</sup>. Effective and accurate prescription information transferred from the hospital to the patient's GP and community pharmacist ensures optimal patient care<sup>(2,4)</sup>. The inaccuracy of medication documentation at discharge has been demonstrated in other jurisdictions<sup>(5-7)</sup>.

It is widely accepted that that accurate medication history taking is a fundamental step to ensure safe and effective prescribing during the hospital care episode and to provide a complete and accurate medication profile at time of hospital discharge<sup>(8)</sup>. Research has demonstrated that unintentional omissions and errors may be present in up to 70% of medication histories taken on admission<sup>(9-13)</sup>.

It is known that pharmacists take more accurate and complete medication histories than junior doctors<sup>(14-17)</sup>. This clinical pharmacist activity is known to have a significant association with positive health outcomes (mortality rate, total cost of care, drug costs, length of hospital stay and medication errors)<sup>(18)</sup>.

Providing an integrated medicines management service, incorporating pharmacist obtained or verified medication history taking, standard inpatient clinical pharmacy services and verification of discharge prescription & medication summary has been shown to decrease length of hospital stay (by 2 days) and reduce readmission rates<sup>(19)</sup>. The benefits of a similar approach, "medication reconciliation" have been demonstrated in the United States<sup>(20)</sup> and Canadian settings<sup>(21)</sup>.

Patients may be unaware of the side effects, correct scheduling<sup>(22)</sup>, reason for prescribing medication, follow-up requirements or lifestyle changes required for safe use of their medication regime<sup>(23)</sup>. Patient counselling prior to discharge has been shown to increase patient compliance and understanding.<sup>(24,25)</sup> There is a paucity of published evidence on the impact of medication reminder charts on patient care.

Policy documents outlining strategies to promote medication safety for patients moving from one care environment to another have been produced in the United Kingdom (UK)<sup>(26,27)</sup> and the United States (US)<sup>(28)</sup>. At present, there exists no such policy or recommendations in the Irish setting, nor is there any published evidence to suggest the need.

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