**Introduction**

EQUIP study (Dornan et al 2009) demonstrated:
- 4% prescribing error rate amongst doctors of all grades
- errors most commonly made at the time of admission to hospital
- most errors were identified and corrected following pharmacist intervention.

The National Institute of Clinical Excellence (NICE) recommends medicines reconciliation to be completed within 24 hours of admission to hospital.

**Objectives**

To determine if patients’ regular medications are appropriately prescribed by independent prescribing pharmacists within 24 hours of admission to hospital, in accordance with NICE.

Review the quality of documentation for intentionally omitted regular medications.

Ensure compliance with VTE CQUIN recommendations for 95% of VTE risk assessments completed within 24 hours of admission to hospital.

In-charge pharmacist on the theatre admissions unit has significantly improved the quality and accuracy of prescribing in elective surgical patients for both regular medications and thromboprophylaxis.

**Results**

Sixty-two patients reviewed over 5 days.

Medicines reconciliation was completed in 100% of patients within 24 hours.

In an average 5 day week on TAU, the independent prescribing pharmacist prescribed an average 249 regular medications.

In 28/62 patients, 28 regular medications were not prescribed but an appropriate alternative prescribed.

In 4% of patients, the regular medications were not prescribed but an appropriate intervention identified.

Sixty-two patients reviewed over 5 days.

A recent patient safety solution issued by the World Health Organization highlighted:
- Up to 67% of patients’ medication histories taken by medical staff have one or more errors.
- Up to 46% of medication errors occur when new orders are written at admission or discharge.

Studies have shown that unintentional discontinuation of long-term medications for chronic diseases may increase risk of adverse effects (Bell et al 2011).

**Reasons for Intentional Omission of Regular Medications**

- Awaiting analgesia for anaesthetist.
- Not required post operatively.
- Regular analgesia omitted as prescribed ERAS protocol.
- Alternative prescribed.
- Unable to confirm topical medication name.

**Methods/Study Design**

There have been a cohort of prescribing pharmacists on Theatre Admissions Unit (TAU) since Oct 2012. Their roles include:
- Prescribing regular medications
- Completing VTE risk assessments and prescribing appropriate thromboprophylaxis
- Prescribing appropriate prophylactic antibiotics
- Prescribing enhanced recovery arthroplasty surgery (ERAS) protocol for patients undergoing hip and knee replacements.
- Peri-operative management of diabetes mellitus, steroids and regular medications.

The role of the pharmacy technicians is to complete medicines reconciliation for each patient on TAU.

Retrospective analysis of electronic prescription records for all patients admitted to TAU over a 5 day period.

Analysis of pharmacist activity data for a 5 day period on TAU.

**Discussion**

Prescribing pharmacists and pharmacy technicians have a pivotal role in completing medicines reconciliation within 24 hours and prescribing regular, chronic medications to ensure patients do not miss doses thereby potentially reducing the risk of complications post surgery.

Early completion of VTE risk assessments and prescribing of appropriate thromboprophylaxis will also reduce the risk of complications post surgery and reduces the burden of hospital associated thromboembolism.

The presence of a prescribing pharmacist on TAU has also resulted in additional interventions being made including:
- Advising on and prescribing intraoperative antibiotics.
- Managing SC insulin pumps pre and post operatively.
- Managing anticoagulants and antplatelets in the peri-operative period.
- Answering medicines-related queries from anaesthetists.

**Conclusion**

Prescribing pharmacist colleagues and pharmacy technicians; TAU nursing staff, healthcare assistants and receptionists; Anaesthetists; Surgeons; Orthopaedic surgeons; Gynaecologists.

**Acknowledgements**

Prescribing pharmacist colleagues and pharmacy technicians; TAU nursing staff, healthcare assistants and receptionists; Anaesthetists; Surgeons; Orthopaedic surgeons; Gynaecologists.

**Table 1: Average Prescribing Activity on TAU per week (5 days Monday to Friday)**

<table>
<thead>
<tr>
<th>Medication Class</th>
<th>Prescriptions per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Medications</td>
<td>249</td>
</tr>
<tr>
<td>Low Molecular Weight Heparin</td>
<td>54</td>
</tr>
<tr>
<td>NSAIs</td>
<td>12</td>
</tr>
<tr>
<td>Prophylactic Antibiotics</td>
<td>10</td>
</tr>
<tr>
<td>IRA protocol</td>
<td>16</td>
</tr>
<tr>
<td>Thrombosis prophylaxis</td>
<td>18</td>
</tr>
<tr>
<td>Antiplatelet Medications</td>
<td>25</td>
</tr>
<tr>
<td>VTE risk assessments</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>343</td>
</tr>
</tbody>
</table>

**Table 2: Example of electronic prescription records**

- Example of medicines reconciliation note
- Example of electronic prescription record