

Exploring The Role Of The Perioperative Pharmacist

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Background

- It is well documented that having an accurate medication history and medication review completed early in a patient's hospital admission reduces medication misadventures and improves patient care^{1,2}
- As surgical patient turnover increases at TQEH, ward-based surgical pharmacists are increasingly busy completing a number of admission and discharge based activities
- The TQEH perioperative pharmacist position (based in the Day of Surgery Admission unit, the entry point to the operating theatres) was created to assist in the timely completion of admission-related clinical pharmacist activities (e.g. Medication history, medication reconciliation, clinical review) for elective and emergency surgery patients who will be admitted to the wards post-operatively

Aims

- Determine the number and type of clinical activities and interventions performed by the perioperative pharmacist
- Investigate the type of patient reviewed (e.g. smoking status, percentage who are opioid naïve) and determine number with a completed medication chart at the time of review in order to explore further opportunities for the perioperative pharmacist's role

Method

Inclusion Criteria

- Emergency or elective surgery patients requiring a postoperative ward admission, without a medication history completed by a ward-based pharmacist on the day of surgery

Data Collection

- Prospective audit over 10 business days
- Eligible patients identified from daily theatre list
- Data collection sheet completed by perioperative pharmacist and included: basic demographic data, number and type of clinical pharmacy intervention performed, patients' smoking, alcohol and opioid naivety status and basic medication chart audit (e.g. were post operative care medications and patients' regular medications charted at the time of review)
- Any medication or clinical issues identified by the perioperative pharmacist were highlighted and actioned as per usual routine care

Results

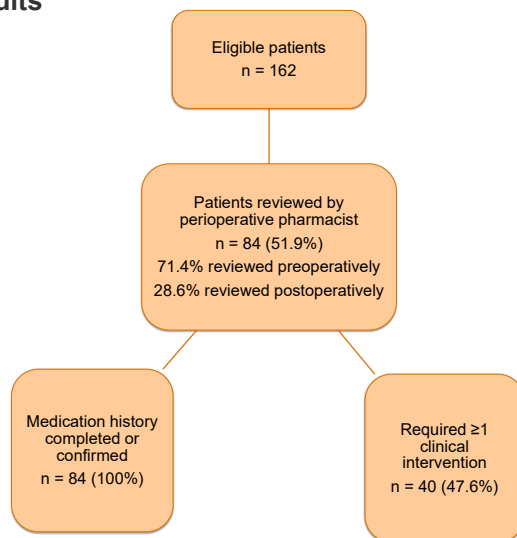


FIGURE 1: Number and type of activities performed by the perioperative pharmacist

Results

	n = 84
Average age (years)	
Mean	61.96
Median	67
Female sex – no. (%)	46 (54.8)
Elective surgery patients	
With PAC ⁺ pharmacist review – no. (%)	25 (29.8)
Without PAC pharmacist review – no. (%)	50 (59.5)
Emergency surgery patients – no. (%)	9 (10.7)
Smoker – no. (%)	16 (19)
At risk of alcohol withdrawal [#] – no. (%)	2 (2.4)
Opioid naïve [^] – no. (%)	67 (79.8)

Figure 2: Demographics of patients reviewed by the perioperative pharmacist. ⁺Pre Admission Clinic. [#]>6 standard drinks/day for women and >8 for men³. [^]Not received opioids in the previous 30 days⁴

- 45 clinical pharmacy interventions were performed in a total of 40 patients

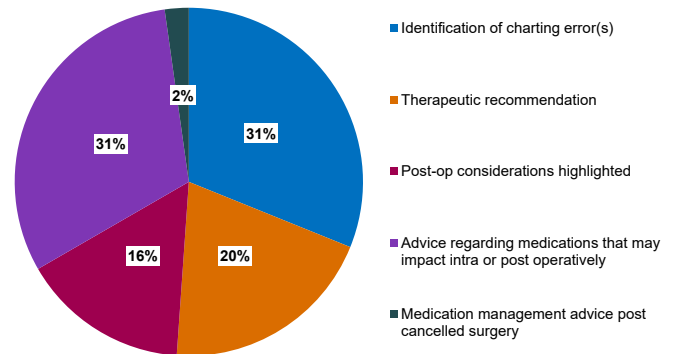


Figure 3: Types of clinical pharmacy interventions completed by the perioperative pharmacist

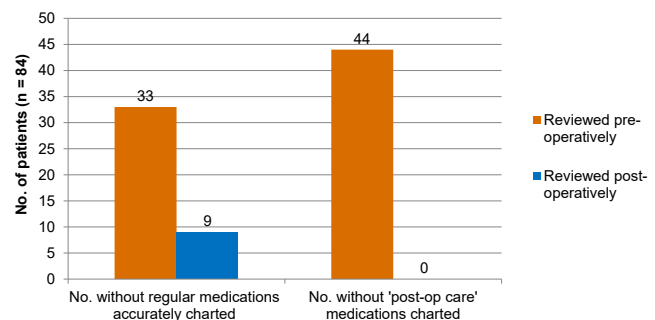


Figure 4: Number of patients who did not have a completed medication chart (usual regular medications and/or post operative care medications³ ordered) at the time of the perioperative pharmacist review ³Defined as routine post operative care medications such as VTE prophylaxis, analgesia, antiemetics, aperients etc.

Discussion and Conclusions

- The perioperative pharmacist was able to undertake a number of clinical pharmacy activities and interventions, the majority of which were completed preoperatively
- The identification of medication issues that might impact on intra or postoperative care was one of the most common clinical interventions, highlighting that a *pre*operative review by a perioperative pharmacist is of greatest value
- The prevalence of incomplete medication charts indicates a perioperative pharmacist may have a role in this process
- Patient demographics suggest a potential role for the perioperative pharmacist in analgesia stewardship and smoking cessation/provision of nicotine replacement and should be explored further
- Limitations: impact of perioperative pharmacist interventions was not assessed, impact of perioperative pharmacist activities on workload of ward-based pharmacist was not assessed