

Medication Storage and Availability in the Anaesthetic Drug-Trolley at a Single Institution

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Background

Perioperative medication-errors have the potential to lead to major morbidity and mortality for our patients. Such errors occur in about 5.3% of surgeries - 70% of which are preventable. [1]

In 2017, the British Journal of Anaesthesia published guidelines on medication safety in the operating room to address this critical safety-issue. [1]

With regards anaesthetic drug-carts, recommendations include standardising the storage of medications across all locations, clear labelling of the contents of each drawer, and standardised stocks of drugs in standard concentrations.

Methods

- 18 drug-carts positioned where anaesthesia is provided at Galway University Hospital were audited
- The contents of each drawer, including medication and its concentration/volume.
- Contents of carts were then compared to one another to assess for consistency.

Results

Only 4 medications of 47 were consistently found in the same drawer of each cart (i.e. 100% consistency).

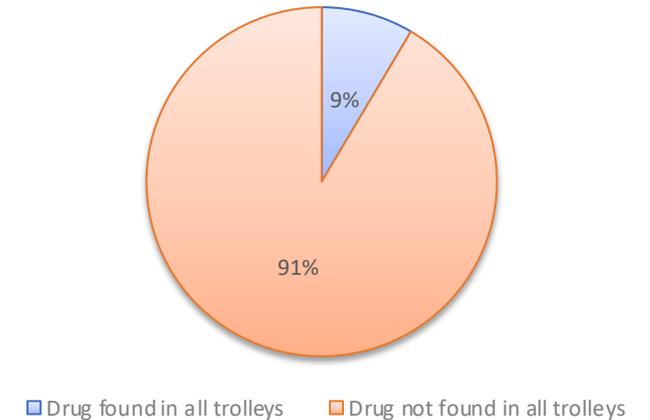
Notable medications such as Salbutamol (17% consistency), Noradrenaline (17%), Naloxone (78%), and Metaraminol (67%) were not reliably available in the emergency-drawer of these trolleys

Unexpectedly, 45% of trolleys contained medications with entirely non-English branding; namely Spanish, Italian, and German. We also observed a substantial number of medications incorrectly placed in the trolley (e.g. rocuronium).

References

[1] J. A. Wahr, J. H. Abernathy, III, E. H. Lazarra, J. R. Keebler, M. H. Wall, I. Lynch, R. Wolfe, R. L. Cooper, Medication safety in the operating room: literature and expert-based recommendations, *BJA: British Journal of Anaesthesia*, Volume 118, Issue 1, January 2017, Pages 32–43

Drug Placement Consistency



Conclusion

Maintaining consistency in medication availability, standardised concentrations, and location of storage in drug-trolleys is a simple but crucial means of tackling perioperative medication-error, and furthermore ensures the safety and timely treatment of the patients under our care.