

# ED Phlebotomy Service Pilot – A Quality Improvement Audit

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## Introduction

QEII Hospital Emergency Department (ED) faced significant pressure from increased patient presentations in relation to the hospital size and staffing profile. This resulted in extended length of stay for patients in ED and increased clinician workload.

Phlebotomy services in some centres have been shown to reduce contamination rates and decrease “turn around time”(1).

In July 2019, a group of phlebotomists were trained to provide a service to the ED, funded initially via the Hospital Auxillary for 5 hours per day, 7 days per week

Their scope of practice included phlebotomy, IV cannulation, venous blood gas sampling and, later, nasopharyngeal swab collection

Requests for these services were instigated by Medical and Nursing staff

## Methods

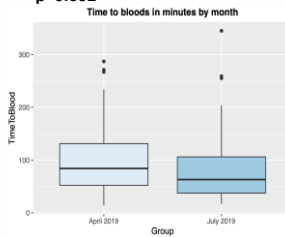
Retrospective pre- and post-observational study. A comparative sample of matched patients was made pre (145 pts) and post-introduction (194 pts) of the phlebotomy service

Outcome measures;

- Time to bloods
- Emergency length of stay
- Time to IV therapy
- Haemolysis rates
- Staff satisfaction

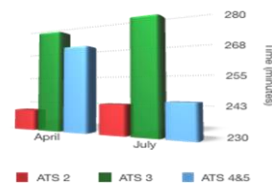
## Results

**Time to bloods reduced from 84mins (April) to 63mins (July), p=0.002**

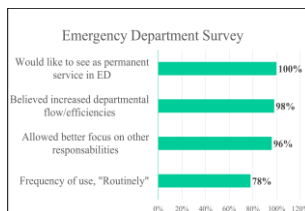


**ELOS for Triage category 4&5 reduced by an average of 24minutes**

**Length of stay (minutes) by month and triage category**



**Extremely high staff satisfaction**



**No significant benefit in other study outcomes**

## Discussion

The ED Phlebotomy Service added benefit to patients and staff, however cost is a significant barrier to the introduction and maintenance of such a service.

Service hours had expanded since this initial audit and there was ongoing support from staff in the ED.

Further work is required to ascertain the true source of haemolysis (seemed to increase in this audit) and to assess outcomes for a larger cohort.

ED Phlebotomy staff enjoyed this expansion of skilset and team based activity and perhaps there was benefit beyond those assessed outcomes, in the way teams function in a busy ED.

## References

1. Using evidence-based practice to create a venous access team. Macphee, Maura Journal of Paediatric Nursing, December 2002, Vol.17(6), pp.450454