

Releasing clinical time through better access to Point-of-Care (PoC) testing

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1. Background

Timely investigations can be seen as one of the barriers to clinical efficiency and ultimately to patient safety.

With increasing numbers of patients presenting directly to the Acute Medical Unit (AMU) rather than via the Emergency Department (ED), earlier assessment and investigation is fundamental to a safe admissions process.

PoC testing has become essential to this process and whilst there is access in another department (the ED), each sample was taking around 10 minutes to process therefore costing approximately 3.5 hours of direct clinical time per day. We hoped that the addition of a second blood gas machine in a more convenient location would improve this.

2. Project AIM

To reduce the time taken to run blood gas analysis in the AMU by 50%.

3. Project design

- The baseline demand and overall process time was calculated from an observation of the high users in a convenience sample of 30 blood gasses over a 4 week period.
- A further convenience sample of 30 samples over 4 weeks was taken after intervention and compared to previous.
- Overall usage of both machines (AMU and ED) over a 10 week period was monitored and compared to ensure that total demand did not rise significantly

6. Lessons and next steps

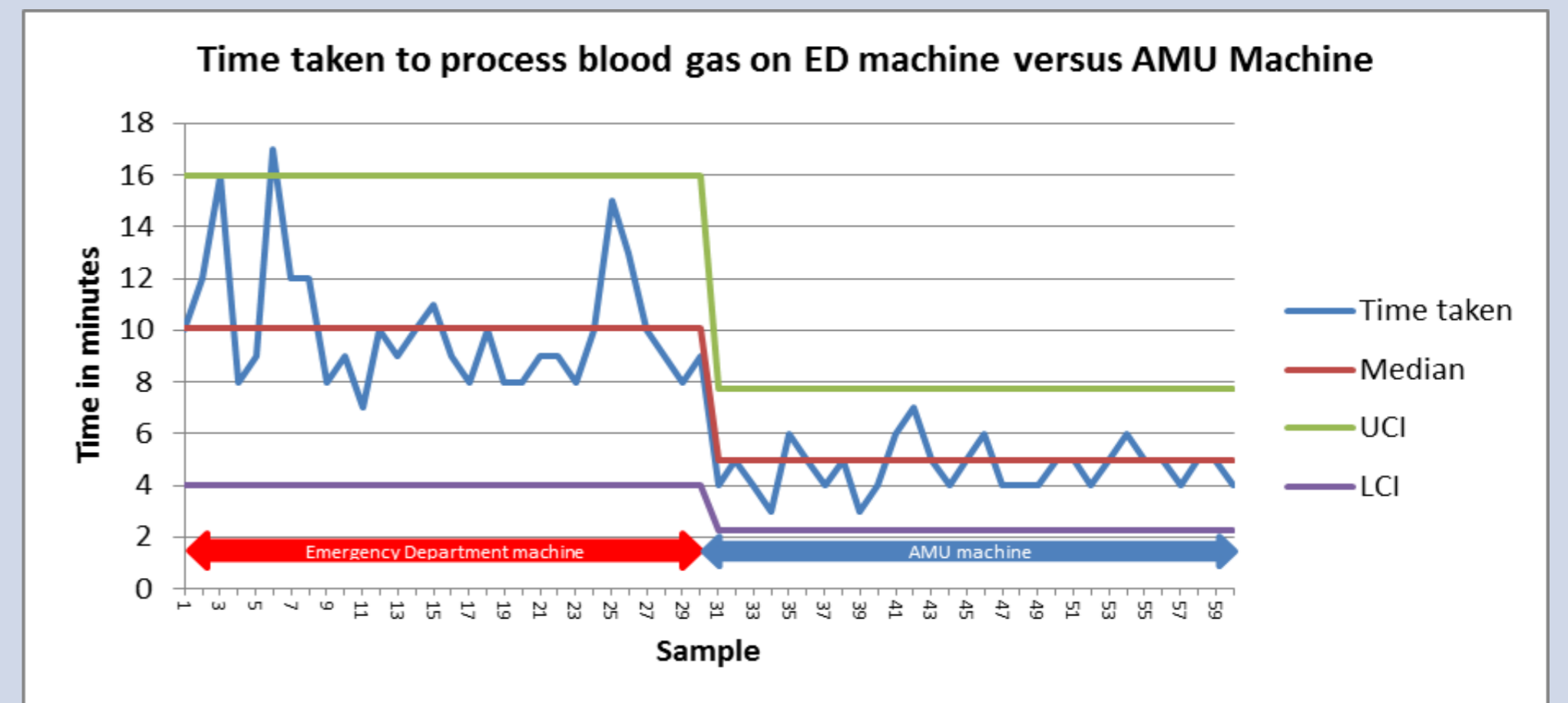
- Installation of new equipment is a protracted process due to the complexities of negotiating with multiple different people/ departments
- Be aware of the limitations of technology in terms of data collection
- Time spent liaising with stakeholders can be key to the longevity of a project
- QI plans need to be dynamic to adapt to changing circumstances

Next steps

- Initiate a further PDSA cycle in order to control potentially inappropriate demand for PoC testing
- Formally agree ongoing funding as part of trust-wide PoC strategy

4. Outcomes

After installing the AMU machine the average length to process a sample dropped significantly from 10 minutes to 5 minutes



This resulted in a 50% time saving which would equate to a clinical time saving of approximately 650 hours per year. This represents a cost saving of between £7-11k per annum.

5. Balancing measures

Whilst there is a gradual increase in numbers of samples processed in the AMU this remains within the projected numbers with a slight reduction seen in ED activity.

