Point of Care Testing Elective

By Dr Emma Dewar

I am a 2nd year STP in Clinical Biochemistry based at Aberdeen Royal Infirmary (ARI) in the North East of Scotland. Aberdeen Royal Infirmary's Clinical Biochemistry Department manages a POCT service that includes blood gas analysers, blood glucose and ketone meters but results are not reported electronically. This is an expanding field in several disciplines including Clinical Biochemistry with key areas such as safety, management, quality, training, documentation and transmission of results requiring serious consideration prior to implementation of a POCT service. Therefore, after witnessing a presentation at ACB's Focus conference I organised to spend four weeks, full-time, at John Radcliffe Hospital (JRH; Oxford) to observe a much larger POCT service with electronic reporting.

My role mainly involved in verifying the Abbott i-STAT POCT device, producing SOP's to accompany these instruments and their implementation in a Community Hospital ward and a Clinical Decisions Unit (CDH). In addition to this, I received training for the Abbott i-STAT devices and the POCT software used by the laboratory as well as working with Abbott and observing the service as a whole.

The verification work was incredibly interesting in because it allowed me to spend time in A&E and ITU to collect comparison data from the blood gas analysers. It was enlightening to observe busy departments and how POCT is making a real difference to patient care by enabling identification of patients requiring urgent intervention, allowing them to be treated more quickly. I was also able to work with the manufacturers while they communicated with POCT users throughout the hospital allowing me to witness novel uses of POCT devices. Lastly, utilising the gathered data, contributing to verification reports and writing SOPs gave me a better understanding of the challenges of POCT verification and documentation.

Overall, my elective has given me a fantastic insight into the governance and management of a large POCT network. I received training to use POCT devices and software that may be implemented into my trust in the future as well as being able to take home some key lessons regarding the issues surrounding POCT.