

## **ELECTIVE (SSC5a) REPORT (1200 words)**

A report that addresses the above four objectives should be written below. Your Elective/SSC supervisor will assess this.

Emergency Department at the Royal London Hospital

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### Objective 1-

To observe the pattern of trauma within the local population and how it relates to trauma found throughout the UK and globally

I had the opportunity to observe different types of trauma that arrived in the department. This varied from motor cycle collisions, bicycle collisions, falls from height, major burns, stabbings and assault to name a few.

The pattern differs to my previous SSC in the emergency department in Belfast as the hospital was not a trauma centre and saw a lot of medical emergency cases arriving such as status epilepticus, cardiac arrest following myocardial infarction. In Belfast, the hospital did not have neurosurgery or vascular surgery so patients with major traumatic injuries normally found themselves being diverted to one of the other hospitals in Belfast. This was not the case at the Royal London as there were most specialties available onsite apart from the PCI service which could be found not too far away at St Bartholomew's hospital. As a result of the access to the specialties, the RLH sees cases of head injury and those suffering traumatic injuries very frequently. It was interesting to note that, being the base of the London's air ambulance helicopter and crew, and having a helicopter pad meant that patients arriving via this route could have more detailed interventions prior to arrival than they may necessarily have had if brought in my London ambulance service paramedics. Some such interventions I witnessed included being intubated and ventilated, having REBOA performed- this is a specialist intervention involving placement of a balloon into the aorta via the groin and inflation to preserve life in cases of significant trauma and potentially fatal haemorrhage.

Overall, the pattern of trauma at the RLH was wide and varied and included the most complex of cases that, given the status of the hospital as a major trauma centre, were able to be dealt with in a professional and organised manner.

### Objective 2-

To describe the pattern of emergency care provision in this area in relation to throughout the UK and more far afield.

The provision of emergency care in the Royal London was second to none, because of the size of the hospital and its status as a major trauma centre, it saw many attendances every day. The

service itself runs smoothly due to its ability to cope with the volume of patients. A report published in March 2014 describing the standards for emergency care provision within London saw a self-assessment of the Royal London A and E services performed. On reading this it can be seen that the department has a senior doctor presence 7 days per week in the form of ST4 or above, there is also a consultant presence for a minimum of 16 hours per day, 7 days a week and on call available outside of these hours (NHS England, 2014).

The imaging services all met the standard required with CT scans available immediately and ultrasound able to be performed with adequately trained physicians present 24 hours per day. These standards have been set by NHS England and apply to all London hospitals. The service provision was similar to my experience within other hospitals and more far afield in Belfast.

The emergency department itself is divided into areas that help to ease the flow of patients. Triage is followed by emergency assessment, where the rapid assessment of patient is done. Here blood samples can be taken, ECGs can be performed, Blood gas analysis is done and patients are further triaged into being sent to various appropriate locations in the department including resuscitation, emergency care, clinical decision unit and the 'cubicles' area for patients potentially being admitted to the hospital under various teams.

#### Objective 3-

To observe the availability of good pre-hospital care related to the rest of the UK and globally.

The availability of good trauma care and pre-hospital care in the context of London has undoubtedly changed outcomes for patients in certain cases. I saw patients' who had had procedures performed in the pre-hospital setting at the roadside that would have impacted whether the patient had made it to hospital to be treated. For example, the case of the patient requiring REBOA helped me to observe that these advances in pre-hospital management and care have made saving more lives possible in specific patient groups. With the high population density and occurrence of trauma in London, their access to the pre-hospital service provided by the London's air ambulance and the London ambulance service has.

This service was not available at the time that I was present in A and E in Belfast but has since been developed and is in the early stages of being available, this will inevitably save lives in the province and the techniques I had the opportunity to observe in the Royal London will hopefully be available in other regions of the UK.

The helicopter emergency medical service has 21 different air ambulance services within England, Scotland and Wales. Hopefully this service will continue to grow in strength and provide this invaluable service to the public.

#### Objective 4-

To develop my knowledge and skills in assessing patients particularly in emergency setting.

The opportunities available to me as a student at the Royal London were abundant. A busy department with a broad spectrum of patients made it easy to develop my skills further. I had

the opportunity to take histories, insert cannulas, take bloods, assist in trauma calls and attend teaching sessions, particularly ultrasound courses run by my supervisor, Professor Harris. These courses proved to be a very good learning opportunity and I feel more confident in my skills as a result, I would highly recommend these to other students.

Of particular interest to me was the steady stream of trauma cases that came through the door as I would have the opportunity to compare this patient group to the one I experienced while on my SSC in Belfast within the emergency department.

Having access to the base of the London air ambulance and being a major trauma centre, the patient population was never without interesting clinical learning opportunities.

Early into the attachment a patient with 60% burns across his body attended, of these the majority were 3<sup>rd</sup> degree and allowed me to observe the management of this type of injury. I was able to observe the assembling of the trauma team, their ability to perform a rapid and skilled primary survey and the features that this involved.

I saw much trauma whilst placed here and a significant number of patients having compound fractures as a result of motorcycle and bicycle collisions with vehicles. This demonstrated how to do a good vascular and neurological assessment of the limb.

I also had the opportunity to observe medical cases including diabetic ketoacidosis and sepsis on a frequent basis, I feel more confident with my clinical judgement of these cases now as a result.

A code red call came in close to the end of my attachment, observing this allowed me to see the management of a patient who had been stabbed and how the team treat this, the team set about ordering blood products and assembling the trauma team. Each member of the team was given a specific role to perform and aware of their role prior to the patients arrival. This helped me to observe the importance of good communication, team working and having a clear leader of the team. The event ran smoothly and the patient was taken to interventional radiology for treatment of a bleeding branch of his internal iliac artery.

Overall, I enjoyed my placement and gained a great depth of knowledge into ultrasound that I otherwise wouldn't have had the opportunity to do. I saw plenty of cases that helped improve my knowledge of trauma care.

## References-

- 1.NHS England (2014) London Quality Standards Self-assessment 2013 Royal London Hospital (<https://www.england.nhs.uk/london/wp-content/uploads/sites/8/2014/03/sa-lqs-ryl-lndn-hospital.pdf>)
- 2.<http://www.uk-hems.co.uk/news.html>