

ELECTIVE (SSC5b) REPORT (1200 words)

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

1. Describe the pattern of disease encountered in the intensive care unit at St Bartholomew's Hospital

My elective was undertaken in the Intensive Care Unit (ICU) at St Bartholomew's Hospital in London, England. The unit consists of 16 beds and delivers highly specialised intensive care services to in-patients at St Barts hospital, as well as to patients with complex intensive care needs transferred from other hospitals across London.

In recent decades St Barts hospital has been developed as a centre of excellence in cardiac and cancer care. The pattern of health conditions encountered in the ICU reflects this.

The majority of patients are admitted to the unit with life threatening cardiac conditions such as out-of-hospital cardiac arrest, myocardial infarction, structural cardiac disease, post-cardiothoracic surgery, and complex cardiac dysrhythmias.

A smaller proportion of patients are admitted due to oncological conditions, with the most common being haematological and endocrine malignancies.

The unit is also one of only a few in the entire country that provides the highly specialised medical intervention Extra Corporeal Membrane Oxygenation (ECMO). The intervention provides respiratory and/or cardiac support using a technique whereby blood is drained from the venous system and subsequently oxygenated and decarbonated externally before being returned to either the venous (VV-ECMO) or arterial (AV-ECMO) circulation.

The unit is therefore special in that it regularly encounters patients with the most severe cases of cardiac and respiratory failure that have deteriorated despite maximum conventional intensive care treatment.

2. Describe the pattern of health care provision in the intensive care unit at St Bartholomew's Hospital

The unit provides 'Level 3' care, which means it admits patients that require either support for two or more organ systems or advanced respiratory support alone. Patients are closely monitored through one-to-one nursing, twice daily ward rounds and additional frequent reviews as guided by their clinical status.

The intensivists also collaborate closely with clinicians from other medical and surgical specialties to provide individualised and highly specialised care. This again reflects the hospital's profile as a dedicated cardiac centre, and therefore frequently involves cardiac subspecialties such as the heart failure team, electrophysiology team, and cardiac intervention team as well as the cardiothoracic surgical team.

Perhaps most importantly, however, is the multidisciplinary approach to patient care, which truly comes to light in intensive care medicine. The core multidisciplinary team in the ICU consists of intensivists, nurses and physiotherapists who are based on the unit and involved in the patient care on a daily basis. The extended team includes a wide range of medical and non-medical professionals such as speech and language therapists, dieticians, social workers, psychologists, chaplains, and

occupational therapists. Once a week an MDT meeting is held on the unit and the management of each patient is discussed with input from the various members of the team. The multidisciplinary approach ensures that care is holistic and tailored to each individual patient.

At St Bart's a follow-up in clinic is offered to patients who had either an ICU stay of more than five days or a complicated clinical course during their admission. The ICU follow up clinics have arisen as a result of increasing recognition that critically ill patients suffer a range of physical and mental health disabilities in the months and years after discharge from the intensive care unit. The once weekly ICU clinic, which I was able to attend during my elective, offers patients and relatives the opportunity to discuss any ongoing issues and concerns. It also enables the clinicians to identify specific health needs and refer the patients to appropriate services for further intervention or follow up.

From my perspective it was very interesting to see the wide range in how patients had recovered after critical illness. Some had made a near complete recovery within only a few months and had hardly any recollection of being in ICU, whereas others suffered debilitating physical impairments and were troubled by frightening memories from their time in the ICU. This highlights the importance of having a structured follow-up scheme for these patients in the months following hospital discharge

3. Personal/professional development objective: Gain an insight into the world of intensive care medicine, and develop skills related to the speciality

My main personal objective for this elective was to explore the specialty of intensive care medicine and gain confidence in assessing and managing critically unwell patients. During my time on the unit I was able to examine and present patients before they were reviewed by a senior. I also spent some time shadowing the on-call intensivist and outreach team which was an excellent learning opportunity in assessing patients with acute life-threatening clinical conditions.

I was also able to observe clinical procedures such as arterial line insertion, percutaneous tracheostomy fitting, electrical cardioversion and central venous line placement. From this I have gained a greater understanding of these procedures, including what their indications are and what complications may arise.

I also received a lot of teaching from the registrars on cardiac and respiratory physiology, and on the various forms of respiratory support ranging from simple supplemental oxygen therapy using face masks through non-invasive ventilation such as CPAP and BiPAP to intubation and invasive ventilation. Having a good understanding of airway management and respiratory support, and particularly knowing how to manage and escalate a patient in respiratory distress, will be incredibly valuable when I commence my foundation training in a few months.

One of the most valuable learning points I gained from this placement, and one which I had not expected when I started, was a greater appreciation of the interaction that takes place between clinicians and patients and their relatives in the intensive care setting. I learned the importance of involving patients when examining them or performing procedures because they may very well be aware of what is happening around them despite being under sedation.

Difficult conversations with patients and their relatives regarding prognosis and outcomes are an inevitable part of intensive care. As students we rarely have the opportunity to observe these as our presence is usually superfluous in such sensitive situations. As a result many of us will have had very little experience in how to approach patients and relatives regarding difficult discussions when we

start working as doctors. During my time on the unit, however, I had the opportunity to observe the clinicians breaking bad news and discussing poor prognosis with their patients. I witnessed several good interactions between the clinical staff and patients and their relatives, which was a valuable experience that I learned a lot from and will take with me into my foundation training years.