ELECTIVE (SSC5b) REPORT (1200 words)

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

1. What are the common presenting respiratory conditions in Eastern Australia? How do they differ from London?

There are many respiratory conditions that are prevalent in both England and Australia, however COPD, asthma and pneumonia tend to be the most common. In Eastern Australia and England, asthma seems to be the commonest of the three. Asthma is a condition affecting the small airways resulting in collapse of the bronchioles. The commonest feature of this condition is an expiratory wheeze. A possible reason for this may be due to the hygiene hypothesis, where the population has not been exposed to many allergens commonly found in the environment due to the hygienic state of the countries resulting in common antigens triggering an inflammatory response.

In the UK, during 2012, 12% (8milion) of the population was diagnosed with asthma (British Lung |Foundation, 2012). In Australia, between 2004 and 2013, the East Midlands, NW and SW areas had the highest incidences. In 2012, 10.8% (2.3million) Australians had asthma, with the rate reaching as high as 22% among the indigenous population (Asthma Australia, 2015). The lowest rate exists in the Northern Territory and the highest in Tazmania (Australian Bureau of Statistics, 2015).

In 2014, 1216 people died from asthma in England compared to Australia (419 deaths). Possible causes could be due to the larger population that exists within the London area or due to the colder temperatures that are experienced during the winter months increasing the risk of infective and non-infective exacerbations.

2. How does the healthcare service in Eastern Australia differ with that of the UK?

Healthcare in Australia consists of a combination of governmental and private services. The governmental healthcare system is called Medicare and is funded through a 1.5% tax. An additional 1% (totaling 2.5%) is paid by those who earn a higher income. This is the deter patients who can afford private healthcare from using the governmental system, although they may choose to pay the additional taxes if they wish. Medicare covers 100% of all inpatient costs and subsidises primary and specialist care outside of the hospital setting.

In the UK, healthcare is free at point of care for all permanent residences, and is funded by the government through taxes. A private healthcare section exists however is less established. Those who prefer private healthcare are still required to pay taxes for the publicly funded healthcare system.

There is therefore a similarity in the healthcare system between the two countries. Demographically, the life expectancy between the two countries is similar, with England having an average expectancy of 79.4 for men and 83.1 for women and Australia 80.4years for men and 84.5years for women suggesting a general aging population between the two countries. However there is a significant difference in bed pressures. England experiences high bed pressures, a possible reason for this may be due to the population of this densely populated city being 8.5m and the population of the New South Wales state being 7.7m.

3. To compare the management of the most prevalent respiratory condition in Australia to the UK

The management of asthma is maintained primarily in the community setting in both Australia and UK. General Practitioners play a key role in educating and managing patients with asthma. In Australia, action plans are implemented (National Asthma Council, 2016). Action plans provide guidance on the management of their conditions and when to increase their treatment according the symptoms that they may experience. It empowers patients to manage their condition themselves, with the ability to seek additional help and services if needed.

Hospitals play an important role when attacks become acutely severe, life threatening or near fatal.

The management of asthma in adults is similar between the two countries. There is a stepwise approach, where the management step is determined by the success of the medicines from the previous step. The management for adults are summarised below:

Management steps for asthma maintenance for adults in Australia and England

Step	Australia	England
1	SABA as required	SABA + ICS as required (low dose)
2	Add on ICS regular (low dose)	ICS regular (low dose)
3	Add on LABA (as ICS+LABA combo)	Add on LABA (as ICS+LABA combo)
4	Increase ICS (moderate/high dose)	Increase ICS (medium dose) or LTRA, Theophylline, LAMA
5	Referral to specialist	Increase ICS (High dose) or add fourth drug + referral
6		Regular low dose oral steroid + Referral

Although the approach is the same, in the UK, all adults who have asthma are immediately place on a SABA and ICS regime compared to Australia where they are in 2 separate steps. Additionally, the UK management plan includes the addition of other medications such as LTRAs (Leukotriene Receptor Antagonists), Theophylline (Phosphodiesterase inhibitor) and LAMAs (Long Acting Muscarinic Antagonist).

Acute severe asthma attacks require admission to hospital and a combination of salbutamol, hydrocortisone or prednisolone to relieve the inflammation.

4. To reflect on a memorable respiratory case and discuss how I can use this to improve my skills as a junior doctor.

Situation: During ward round the Registrar was discussing the future management with a patient who had recently been stepped down to ward-based care from Intensive Care. She was elderly, had multiple co-morbidities including bilateral lower limb amputations secondary to severe arterial ulcers due to uncontrolled diabetes. The conversation of 'Do Not Attempt to Resuscitate' forms came up. Them medical team that was looking after her thought that this would be the correct time to make a decision regarding a ceiling of care as she was well enough to give consent at that time. When discussing this delicate matter with the patient she disagreed with the medical decision and expressed her desire to have CPR if the situation arrived. This created an ethical dilemma – where the medical

team thought it would be in her best interest to have a form signed but the patient was not happy to do so.

Action: In this situation the registrar acknowledged the patients wishes and discussed the matter further listing the benefits and problems that can occur during and after CPR is carried out. The patient still wanted to have CPR.

Reflection: This case was interesting as it created a conflict between a doctor – who has to work in the patients best interests - and the patient – who had her own personal views. From this experience, I learned the importance of respecting patients' opinions even if it may be seen as a wrong decision. Decisions can stem from a patients personal experience, their opinions or their culture – all of which a doctor may not be aware of when carrying out such a decision. I also learned the importance of informing a patient before they make a medical decision so that they may balance the advantages and disadvantages and come with a decision that they are personally happy with.

Works Cited

Australian Bureau of Statistics. (2015). National Health Survey: First Results, 2014-15 . Retrieved 05 20, 2017, from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2014-15~Main%20Features~Key%20Findings%20—%20States%20and%20Territories~10001

Asthma Australia. (2015). Statistics. Retrieved 05 20, 2017, from Asthma Australia: https://www.asthmaaustralia.org.au/nsw/about-asthma/what-is-asthma-/statistics

British Lung |Foundation. (2012). Asthma Statistics. Retrieved 04 28, 2017, from British lung foundation: https://statistics.blf.org.uk/asthma

National Asthma Council. (2016). Asthma Action Plan. National Asthma Council.