ELECTIVE (SSC5c) REPORT (1200 words)

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

I decided to my elective in neurology at the Royal Melbourne Hospital (RMH). I elected this site for my elective as I know it to be a major centre for neurology research and medicine. They have a large epilepsy, stroke and movement disorders specialism and I was keen to learn about these areas of neurology. I also wanted to learn about how healthcare provision was made in Australia compared to the UK.

As part of my elective experience I joined daily ward rounds and clinics. I also attended teaching session, neurology talks such as on brain surgery on conscious patients, and neurology grand rounds. I found the neurology grand rounds in particular extremely informative; they allowed for the discussion of a neurology case in great detail. It was useful seeing many talented neurologists discuss cases and see that even at their level neurology may not always involve a clear cut diagnosis. I also got to experience the range of presentations that come under neurology whether it is a specific neurological disease, or a rheumatologic or infectious one that presents with neurological signs such as Encephalitis or Sarcoidosis. This range of conditions makes neurology a fascinating area of medicine and is something I was keen to explore. I also saw how much of a crossover there was between neurology and psychiatry whether it be due to functional neurological signs or due to the psychiatric burden of disease such as depression or hallucinations. I found this particularly interesting to learn how some neurological conditions initially present with episode of psychosis for example Neimann Pick disease. The RMH has an established neuropsychiatry department and I joined several clinics there.

I hoped to use my time on my elective to gain a greater insight into neurology and also to use it in part to help inform me about my future career direction. To get this insight I got involved in different aspects of neurology. I spent some time with the Stroke team seeing acute stroke patients arrive in the emergency department (ED). I have spent some time working in the Hyper-acute stroke units (HASU) in the UK as part of an audit on NIH scoring. The setup for stroke medicine is very similar in Australia and in the UK; there are specialist services at certain hospitals which deal with acute management of stroke patients and then further rehabilitation is provided by other local services. There are some logistical differences though. Telemedicine is used at home in the UK but this is predominantly for consultant access to the HASU during out of hours. Telemedicine appears to play a much larger role in stroke service provision due to the vast size of the country and the spread of its population. Patients were arriving at the RMH ED following a suspected stroke after a 45 minute ambulance journey from smaller country towns around Victoria. This may be a direct admission or via a country hospital which does not possess the specialist thrombolytic and clot removal facilities that are present at the RMH. Telemedicine, where specialist stroke clinicians are made available to country hospital service allows for reduced admissions where appropriate and also ensure expert clinical advice is given accurately and in a timely fashion.

Stroke is already in the top three of the World Health Organisation (WHO) biggest killers in the Western world. Importantly as developing countries like China and India become more prosperous it is likely that stroke will become increasingly common and a system structure similar to that in Australia may provide a good framework for developing stroke services in these similarly vast

countries. The role of telemedicine may be particularly relevant to this as rural parts of China are further and more remote than the situation is in Australia so access to medical care may be even harder to achieve. Telemedicine could allow adequate care to be provided, an accurate assessment made and a transfer done only if necessary.

Another area of neurology I experienced was multiple Sclerosis (MS). I have a particular interest as I recently conducted a pilot study looking at the effects of MS on sexual function. I have seen several patients at different stages of MS during my time on neurology. It is a very devastating diagnosis and effects patients in a multiple of ways. The motor and sensory symptoms can be very debilitating. However, as I found during my pilot study the additional aspects of MS can be also have a heavy impact. In Particular I have found from speaking to patient that bowel function and continence are often affected in MS and can leave the patient feeling very down and isolated as they do not want to socialise or leave their homes as often due to the social embarrassment they feel relating to this. The role of the partner, as I found in my own research, is often neglected or under appreciated. I noted that many patients were heavily dependent on their partners but that they could be involved more in the discussions relating to the disease.

The second area I wanted to observe during my elective was to compare method of healthcare funding between UK and Australia. Healthcare costs are always rising as people live longer and new expensive therapies are developed. The funding for healthcare for a population is a constant pressure on people and governments. It has been interesting getting some insight into the issues relating to healthcare funding.

In the UK the National Health Service (NHS) is the main provider of healthcare and is done so free at the point of need. There are private providers in the UK but they are much less common than I have seen in Australia. Australia operates a joint public and privately funded healthcare system with a great deal of overlap between the two. Patients are routinely asked if they have private health cover, a question I have never heard asked within my UK placements. There are a large number of private hospitals and clinics in operation as well as public hospitals which often have a private section attached. As in the UK the public hospitals are of great international standing, as in the case of RMH, and provide excellent clinical care. As in the UK clinicians often have a role in both public and private health facilities. This is very important as it allows people who are dependent on public healthcare to also have the opportunity to access many of the best clinicians.

It has been a good experience talking to clinicians to find out their opinions. The main response I received was that funding for clinics and especially new expensive drugs was, as one neurologist describes it 'a nightmare'. Whilst it can mean that patients with top level insurance cover can get their MRI for example within a short period of time, it does appear that those who do not have cover, or whose cover is not sufficient is left with a long waiting period. One neurologist explained to me that waiting lists for carpel tunnel surgery was up to 2 years, waiting times for neurology clinics was over a year. There are ways to speed this up, there are neurology clinics which have a shorter waiting time but patient must give up their medicare rebate. Funding of clinics did seem particularly stretched. However, the congestion within individual clinics did not seem as severe as in the UK where 10 minutes slots are the standard time allocation. There is also an issue of new expensive drugs being provided. Insurance often does not cover novel and non-routine expensive drugs. This leads to a long process of negotiation as the patient and doctor have to try and get funding through the hospital or discounts by the drug company as I saw with one case of a drug for Niemann Pick disease where the

cost of the drug was in excess of $250,000 per year. In a climate where health costs are rising Australia provides another model at which to look at for ideas on healthcare funding. However, there will always be problems of provision and funding in healthcare and one system will not meet all these demands. However, studies have shown that health outcomes are similar between the two countries, with a recent commonwealth report putting UK first and Australia fourth behind Germany and Sweden, although exact ranking varies slightly between studies. Healthcare spending as a portion of GDP is also similar. One interesting area of healthcare provision is that spending on primary care as a proportion of total healthcare spending in Australia is higher than that of the UK and is something which it seems the NHS is increasingly moving towards which provides a much greater opportunity for preventative medicine.

I wanted to use my elective to get more experience in neurology and a different healthcare system. I have used my time at the RMH to learn about neurological conditions. I have also gained experience in fields associated with neurology such as Neuropsychiatry and Liason Psychiatry; two areas of which there is a large overlap with neurology. I have had exposure to a range of neurological conditions. I have seen a wide range of neurological presentations from Neurosarcoidosis, Encephalitis as well as Gullian Barre and cervical myelopathy. I have also had exposure to the more functional presentations seen within neurology as well as the psychiatric component of neurological disease. I have found the neurology grand rounds a stimulating source of learning within neurology. I have found this elective to be very useful and insightful for helping inform me about the direction of my future career.