

Neurosurgery Elective

A combination of Adult and Pediatric Neurosurgery in between Vancouver (Canada) and Plymouth (UK)

Aims and Objectives:

- Understand more about the neurosurgical technique involved in Neurosurgery.
- Understanding the difference in medical practice between Canada and the UK.
- Scrubbing into surgery and assisting in the Neurosurgical intervention.
- Understand if Neurosurgery is the specialty that I truly want to pursue.
- Understanding differences in healthcare systems and how they effect patient care between Canada vs UK.



Clinical learning and understanding:

Canada Clinical Practice

Neuro ICU ward round started at 6 am, which gave the team more time for other productive activities like surgery and clinics. With this approach, a much larger quantity of patients were seen compared to the UK.

As part of the neurosurgical training program, ST1 and ST2 were given more responsibility in theater and were given more time in theater per day compared to UK trainees.

Due to the specific focus in increasing productivity, there seemed to be less interpersonal care between doctors and patients; the patient-doctor rapport suffered because of this.

More junior Neurosurgeons were not expected to be able to attend to the medical needs of the ward.

UK CLinical Practice

Neuro ICU ward round started at 8:30 am, which slowed down surgical starting times and decreased the quantity of patients being operated on.

As part of the neurosurgical training program, ST1 and ST2 had less time in theater, however more post-op and recovery medicine teaching was provided in the UK.

More interpersonal care between doctors and patients, the patient-doctor rapport was given more importance in the UK. This is something I really appreciate and that the UK did much better than Canada.

More Junior trainees are expected to take charge of the ward round and make important individual patient decisions. This is good to see because doctors transfer their F1 and F2 doctor skills in their surgical specialty.

Risk assesment and management:

Risk	Description	Mitigation Measures Taken	Risk Score (1-5)
1. COVID-19 or other communicable infections	Risk of contracting or transmitting COVID-19 during hospital exposure and travel.	Completed full COVID vaccination series, wore masks in all clinical areas, followed VGH infection control protocols, maintained good hand hygiene, avoided large gatherings outside hospital.	1
2. Travel and accommodation safety	Potential issues with personal safety, transportation, or housing in a new country.	Secured accommodation close to VGH before arrival, researched safe routes, used verified transport services, shared itinerary and emergency contacts with family/university.	2
3. Administrative and visa issues	Possible delays or errors in obtaining elective approval, visa, or insurance documentation	Submitted documents early, communicated regularly with hospital elective office and university coordinators, verified visa requirements and medical insurance coverage.	1

Peronal and professional development:

Personal growth: resilience, adaptability, organisation.

- Had six weeks to adjust to a new team with different expectations.
- Neurosurgeons in both countries were very precise on starting times and expected maximum professionalism which helped me further understand the importance of these values.
- Using public transport at 5am made me increase my resilience and determination.

Professional growth: clinical, communication, cultural competence.

- Further developed stapling, suturing, scrubbing in skills.
- Explored the different healthcare system and this elective made me wonder about Canada as a potential destination for future medical training, such as neurosurgical fellowships.

How this shapes your future practice and career goals.

- This made me 100% confident in Neurosurgery as my future medical specialty
- It also made me understand what it takes to be a Neurosurgeon and all the professional and valuable skills that come with it.

Tips for future students.

- Consider electives as an opportunity to choose your medical specialty, and also as an opportunity to have research and QI project opportunities.
- Electives will show you the subtle details of the specialty such as work-life balance and doctor satisfaction which you will not experience routinely.

Elective Achievements:

- Clinical oversight: I attended ward rounds, Neuro ICU, surgery observations and participation, and teaching opportunities. with UBC medical students.
- Case presentations and discussions with VGH Neurosurgeons.
- Pediatric clinic attendance and understanding the complexities of parent-child communication in the medical setting.
- Consideration of QI/research opportunity regarding migration of VP shunts, UK vs Canada
- MDT discussions.



Wider Health Issues:

Both these electives made me understand the importance of expert neurosurgical intervention and its effects on patients' health and well-being. Both countries adopted a free healthcare system based on taxpayer dollars. One of my greatest critiques of a free healthcare system was the inefficiency argument. More privatized systems are more efficient; however, they lack the ability to serve all kinds of people from every economic standpoint.

Seeing Canada made me realize that great productivity with shorter waiting times can be achieved in a free system. As an example from a productivity perspective, doing handover at 6:30 instead of 8 as was done in Canada, allowed Neurosurgeons (both residents and consultants) to complete everyday tasks rapidly. This extra time would allow surgeries to start earlier while ensuring that patients were seen in the ward rounds. Furthermore, in Plymouth surgeries started around 10, while in Canada they were already operating around 8:45. Again, just by adjusting starting time, this would allow surgeons to do more operations or clinics per day, helping speed up long waiting referral times.

On the other hand, this could result in less patient-focused care. In Plymouth, surgeons seemed to spend more time per patient, answering questions and working on a balanced doctor-patient relationship. In Canada this was not the case. Everything seemed rushed, especially time with patients, they did not have time to answer questions and overall treated patients with less dignity and respect.