

Anaesthetic Department, Toronto Western Hospital, University of Toronto Medical School / Anaesthetic Department, Bracebridge and Huntsville Hospitals, Northern Ontario School of Medicine

With the generous elective scholarship from the Jewish Medical Association UK, I was fortunate to be able to embark on a four-week elective split between the University of Toronto, and Northern Ontario School of Medicine in September 2017. This was a balanced educational experience, allowing enough time to immerse myself in two contrasted realities of anaesthetic delivery in Ontario.

This Canadian elective month allowed my longitudinal medical education to take place in three countries, with different models of healthcare delivery. As a graduate entry student, since my first year at St George's, I have clerked many patients; and I spent approximately six months of my second year of medical school in the wards and the operating rooms of St George's Hospital in London, UK, and its affiliated general practitioner clinics (or "surgeries"). In my third and fourth year I was full-time at Thomas Jefferson University Hospital and its affiliates in Philadelphia, USA. I could not have asked for a better medical school experience, immersing myself in the different healthcare delivery models and their challenges, and learning from culturally diverse patients.

In September 2017, I spent my first two weeks at the Toronto Western Hospital. It is one of the teaching hospitals of Toronto's University Health Network, affiliated with the University of Toronto. The operating rooms are mainly specialized with services such as Neurosurgery, Orthopaedics, and Urology, as well as General Surgery. The hospital is a busy teaching hospital staffed with many residents and fellows. Although I had already completed my third year and my anesthetic rotation in the USA's infamous (and mainly true) gruelling clerkship, I found that the Canadian medical student's experience and expectations were similar. For example, work hours were the same, I was asked to read up and prepare all my next day cases, and conduct my own histories and physical examinations, as part of the pre-operative assessment. I would report to my supervising resident or fellow, and together we would tailor an anaesthetic plan. I was entrusted with various supervised clinical skills such as intravenous line placement, arterial line placement, airway management and intubation. I would calculate the required anesthetic dosages, prepare the anaesthetic drugs and test the equipment. I would write post-operative orders for my patients in the postoperative anaesthetic care unit. The pain and regional anaesthesia service at Toronto Western is world renowned, and I had the privilege of learning from some of the world leaders in regional anaesthesia.

The second half of my elective took place in two small Ontario towns, both approximately a three-hour drive north of Toronto. The Bracebridge and Huntsville Hospitals are part of the Muskoka-Algonquin Healthcare System and are affiliated with the Northern Ontario School of Medicine. In rural Ontario access to healthcare is notoriously sparse, and challenges such as physician shortages, healthcare funding (clearly, a universal issue), and a considerable distance from the nearest level-1 trauma centre are ones that physicians face daily. While anaesthesia in Toronto's large teaching hospital was delivered by supervised residents and fellows (by their attending anaesthesiologist-physicians), in rural Muskoka, GP-Anaesthetists serve this role. Ontario's solution to the shortage of anaesthesiologists in rural areas was to allow an extension to General Practitioner training with a one-year fellowship, that extends their scope of practice to include delivery of certain anaesthetic services. The same is true with Emergency medicine. This is called a "two-plus-one" model in Canada – referring to two-years of family medicine residency and the option to specialize with an additional one-year training. While I am not entirely sure of the limitations of their scope of practice, the GP-anaesthetists were absolutely incredible, competent, safe, and taught me a great deal. I found it interesting that some of them still maintained a part-time family-medicine practice but it makes sense given the healthcare challenges of the population they serve. While Toronto Western had over 20 operating rooms, the Muskoka Hospitals each had two. I did not note much of a difference in the delivery of anaesthesia, but the impact of staff shortages were clear with regard to surgery. There is a small team of surgeons and some visiting (or locum) surgeons that service the Muskoka Hospitals. There was an emergent case that required a laparotomy and the surgical assist was delayed. I was asked to scrub in by the sole surgeon in the hospital. The outcome was good, but the reality is that nurses are often asked to be a first-assist and suboptimal operating conditions due to staff shortages can certainly impact the outcome of surgical services. There is a backup anaesthetist but they could be a 40 minute drive away, where in a crashing patient, minutes count. Another anecdotal story was a young patient that required the expertise of a plastic surgeon (this was determined after an emergent surgical exploration). A mid-surgery phone consultation by the general surgeon (literally) with a plastic surgeon in a specialized centre led the team to decide to call off the procedure and transfer the patient to a centre that can offer such specialized services. Should this patient have been admitted to a large hospital, they would not have required a delay in their operation.

I was very fortunate to witness these challenges. As a Canadian citizen, I was inspired to return and serve Canadians, and the outcome of this experience was that I was accepted on to the Anaesthesiology Residency

Program at the University of Toronto. I am thrilled to enter this phase of my journey, and thank the Jewish Medical Association UK for all their support during my period in UK medical education.

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