ACPGBI Australasian Travelling Fellowship 2015

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Introduction

Metropolitan Sydney has a population of approximately 5 million people and a number of large academic colorectal surgery units that have clinical and research interests covering the whole spectrum of modern colorectal practice. The operative surgery and research output are both outstanding and easily on a par with the best units anywhere in the world. As a relatively newly appointed consultant with a substantial academic interest at one of the UK's newest medical school (University of Exeter) I was interested in gaining insights into the infrastructure and systems that allow the delivery of both internationally renowned operative surgery and seminal research. I arranged to visit two of the units affiliated with the University of Sydney Medical School (internationally ranked in the top 20 by QS World University Rankings).

I flew to Australia in early September with the intention of allowing some time to get over the jet lag prior to commencing my placements. I arrived in Sydney just as winter was ending and was greeted by a climate similar to a pleasant English summer. I had left the strife of the English NHS behind and was greeted by this sight. I wondered if I had landed in Paradise.

I stayed in a self-catering bedsit apartment adjacent to Sydney's central railway station for the duration of my visit. Located at the southern limit of the central business district it allowed easy access to public transport, which is cheap, clean, safe and reliable.

Professor Marc Gladman, University of Sydney & Concord Repatriation Hospital
11/09/15 to 18/09/15

The Concord Repatriation Hospital is a large teaching hospital approximately 15km west of central Sydney. It was built during the Second Word War for military service personnel, eventually servicing the local community from the 1970s onwards. While much of the hospital was impressive new buildings, there was still some of the original architecture left, very reminiscent of Frenchay Hospital in Bristol.

From a colorectal perspective, Concord developed an international reputation due to the pioneering work of Prof Les Bokey, who has now retired. His replacement, Marc Gladman, is a UK trained surgeon who was appointed in 2011 and who in 2012 established the Academic Colorectal Unit. Marc is Professor of Colorectal Surgery at Sydney Medical School and Director of the Enteric Neuroscience & Gastrointestinal Research Group, Anzac Research Institute. His main research interest is in enteric function in health and disease, but he also has developed programmes in surgical service provision & variation, and education. I was keen to find out more about how he had set up his unit, what challenges he had faced and how he overcame them.

The first day was an opportunity to discuss the similarities and differences in training structure and health acre provision / funding between the UK and Australia. Marc very patiently took me through a brief introduction to the Australian system, including the differences in remuneration. It seems to me that the concept of accrediting in general surgery first, followed

by specific colorectal fellowships (overseen by the ACPGBI's sister organisation CSSANZ) is not that dissimilar to how some have envisaged the concept of "credentialing" being applied to surgical training in the UK.

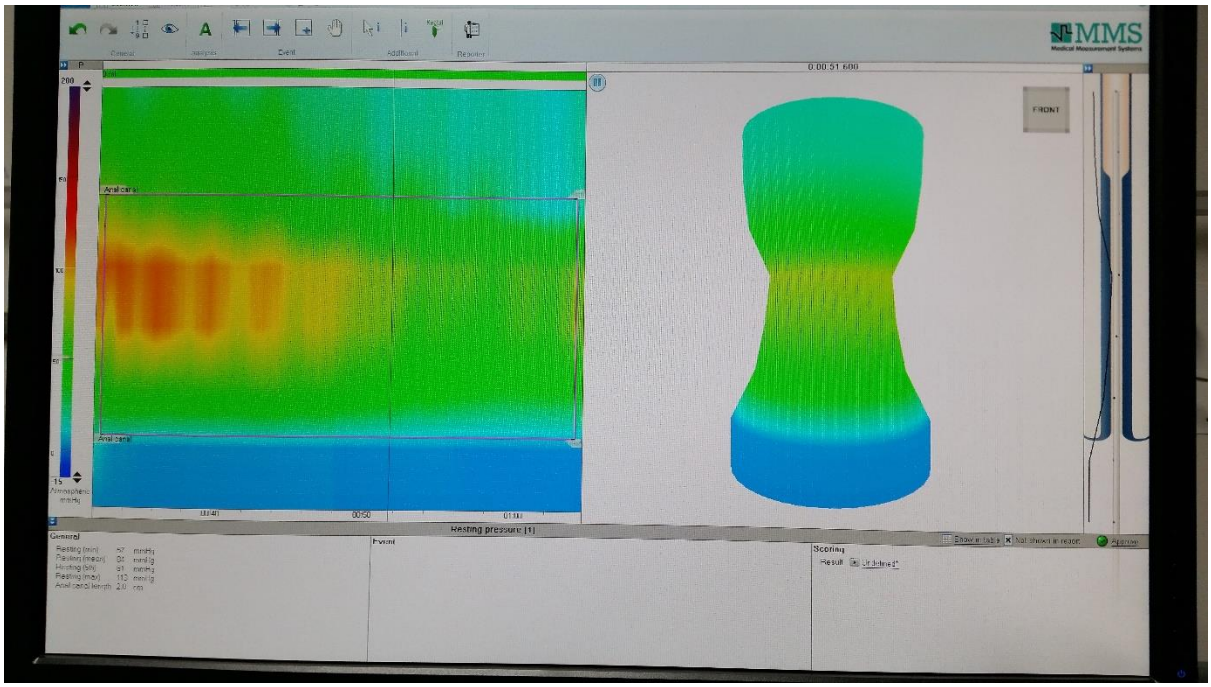
After the initial briefing I had the chance to meet the wider research team including the PhD fellows. Naseem Mirbagheri presented her work on a crossover randomised trial of SNS in patients with faecal incontinence, which was due to be presented later that year at the Asia Pacific Federation of Coloproctology meeting. This interesting work led to a discussion of the underlying neuronal substrate that may effect the changes observed in her study. It was clear from the detailed discussions why she has won so many awards for her research. Pram Sirimanna is a surgical trainee who is one of the many I encountered during my time in Australia who had emigrated from the UK in search of better opportunities. Pram presented his work on validation of a virtual reality simulation model for laparoscopic appendicectomy and incorporation into a proficiency-based curriculum. This award winning research built on previous work from his time at Imperial with Ara Darzi's group.

A tour of the Clinical School facilities confirmed that Simulation has become a prominent them in medical education generally in Australia, with unrivalled facilities for simulated ward care scenarios for example. All of the high specification mannequins can be controlled remotely from a control room behind mirrored glass and the interactions between team members recorded. The non-technical skills element of training is clearly taken seriously.

Clinical work is undertaken at several sites, not just at the main hospital. This piecemeal delivery of a service may look fragmented to the newcomer, but is not at all unusual in Australia and somehow seems to work well. All the patients knew exactly what they were doing and when and where they were meant to be. This seems to be at variance with my NHS experience where similar attempts are often disjointed at best or even shambolic at times. Outpatient appointments were in the beautiful old BMA building on Macquarie Street in central Sydney, allowing lunch overlooking the Opera House and Harbour Bridge, whereas pelvic floor investigations, colonoscopy and proctology are performed at a private facility not far from the main hospital. The work is largely similar to the UK, but with one noticeable exception –

colonoscopy. To UK eyes used to NICE two week wait pathways and British Society of Gastroenterology guidelines the frequency with which this procedure is undertaken was a shock at first, but Marc explained that there are complex market forces in a privately financed system that drive this. It has become a political issue with the newly appointed Australian Prime Minister (Malcolm Turnbull) commenting on the impact of colonoscopy on the Medicare (NHS equivalent) bill not long after taking office. One other difference is that colonoscopies are almost always performed under propofol sedation given by an anaesthetist.

Those ACPGBI members with a pelvic floor interest will be aware that investigations for pelvic floor disorders are not always readily available. I was fortunate enough to be able to spend an afternoon with Marc & Michael Suen (Associate Prof) learning about the high resolution anal manometry kit that they had been using as part of their assessment for patients with pelvic floor disorders. This state of the art equipment is a world away from the Heath Robinson devices I recalled seeing in some units as a trainee. Reviewing some of the dynamic recordings was truly impressive. The discussions that followed revolutionised my understanding of some of the physiology behind low anterior resection syndrome and why some of the symptom scores may not give a complete picture.



Marc holds leadership positions in several organizations, including the Surgical Services and Unwarranted Clinical Variation Taskforces. I was privileged to be able to see some of the work that he has undertaken on behalf of the State and Federal governments regarding outcomes following colorectal resections. The surgeon level and unit level data that we have become used to from NBOCA remains uncommon globally and is not yet available in Australia. It was clear that the world class data we are familiar with from Australian trials and case series from internationally renowned hospitals are not universally replicated. The reasons behind this variation is complex and poorly understood, but the endeavour of Marc and his team is to shed some light on this most difficult of conundrums. Certainly some of facets of

care in Australia generally (few well established ERAS programmes, continued use of unfractionated heparin in all cases) seem rooted in tradition, which all health care systems can be guilty of. The presentation of some of the data to the equivalent of the medical director of the regional health board was illuminating in that it became clear to me that attitude to risk can be perceived markedly different, depending upon ones closeness to the procedure being undertaken. When it is you that is doing the cutting, the risk weighs more heavily.

Between the clinical work and the more formal academic meetings Marc expanded on the trials and tribulations of setting up a formal research department with all the appropriate governance processes in place. Bureaucracy is not limited to the NHS and everywhere has political issues at institutional and governmental levels. Time management is always a challenge, particularly when the clinical service is delivered in geographically disparate buildings. Trial recruitment in the private practice setting didn't pose the challenge that I thought it might because the recruitment and study protocol execution is almost wholly delivered by the surgical team rather than the cadre of research nurses (often NIHR funded) that I am used to in the NHS. This aspect, coupled with the opportunity cost of loss of earnings from the private sector, makes academia in Australia even more a labour of love than it is in the UK.

Professor Michael Solomon, University of Sydney & Royal Prince Alfred Hospital
21/09/15 to 30/09/15

The Royal Prince Alfred Hospital is a large teaching hospital founded in the late Victorian era situated approximately 3km south west of central Sydney on the edge of the beautiful University of Sydney main campus, which is reminiscent of an Oxbridge college.

The hospital enclave is comprised of buildings of varying architectural styles that cover the 120 year existence of the institution. The result is something that closely resembles many of the large metropolitan teaching hospitals in the north of England

The medical school and research buildings are immediately adjacent, while across the road is a new private cancer facility.

Professor Michael Solomon is internationally renowned for his work on IBD and pelvic exenteration for advanced pelvic malignancy. Consequently, the Royal Prince Alfred (RPA) is now the quaternary referral centre for pelvic exenteration surgery with bony involvement for Australia & NZ (4 other centres do soft tissue exenteration). The RPA is funded by the government to do 60 pelvic exenterations per year. Michael is the Founding Director and Head

of the Surgical Outcomes Research Centre (SOuRCe) and the inaugural Chairman of the Institute of Academic Surgery at RPA.

The first day was an early opportunity to meet the whole department at their radiology conference where all interesting cases from over the weekend on call are discussed. There are seven consultant colorectal surgeons, all bar one of whom have worked in the British Isles at some point in their career. The departmental structure was otherwise similar to the UK with interns (akin to FY1) covering the ward duties, registrars (core trainee to ST6 equivalents) and the Fellows (both international and CSSANZ). Ward rounds were led daily by the Fellows at 0700 and all the patients were seen later (usually in the afternoon) by Prof Solomon. Two all day colorectal theatre lists ran most days. Outpatient clinics and colonoscopy were performed in an adjacent private facility. The MDT was on Friday morning with the remainder of the day dedicated to academic work in SOuRCe.

Late morning on the first day was an opportunity to meet the academic team in SOuRCe and to hear first-hand from Michael how he set about developing the research unit over the past 20 years. Rarely does any part of our training in the UK deal with facets of practice relating to building a successful team and even more rarely is best practice freely shared. Michael imparted his decades of wisdom and experience into a succinct summary for the development of both the clinical team who focus on pelvic exenteration surgery (three consultants) and the academic team. I can only liken the experience to having a personal tutorial from Sir Alex Ferguson on how to build a successful football team. The three key messages, unsurprisingly, are that success takes time, you need the right people and data is king. It is the last of the principles that the NHS struggles with. Also, I hadn't previously appreciated the importance of the MSc programme in Surgical Sciences that he had developed with the University of Sydney. This part time on-line course is extremely popular with junior surgical trainees and produces a body of research literate higher surgical trainees (and ultimately consultant colleagues) who can write papers and basic grant applications etc without having to do the prolonged periods of research that now seem to be mandated by the more rigid academic training pathways in the UK. Similar MSc programmes do exist in the UK (e.g. ESSQ by RCSEd) but have not as yet attained the same level of popularity among trainees in my Deanery.

Laparoscopic colorectal surgery in the new private cancer hospital affiliated to the RPA and in the main RPA theatres was indistinguishable from that seen in any theatre in the UK. The training of the colorectal fellows was also largely similar with the training I observed of the highest calibre. I was also fortunate enough to spend time in theatre with Prof Christopher Young who is a member of the Training Board in Colon and Rectal Surgery and past Chairman of the RACS Board in General Surgery and had the opportunity to discuss some of the issues surrounding competency and assessment of trainees.

The pelvic exenteration surgery had much similarity in organisational structure to my UK experience but some important differences. The team structure largely mirrors that of many UK centres with colorectal, urology, gynae and spinal surgeons. Interestingly, the colorectal surgeons do their own flaps if required without plastics involvement. The close and long

standing working relationship between the multidisciplinary team was impressive, particularly the spinal team (led by Paul Stalley) and anaesthetics (John Wynter). All exenteration cases are discussed at a special exenteration MDT held fortnightly. Due to the distances involved preoperative cardiopulmonary exercise testing is not widely used, but the physiotherapists run a "fit for surgery" programme as soon as surgery is contemplated. The ITU has 38 bed (RPA ~ 800 beds) and takes all exenteration patients postoperatively. I was allowed to scrub for the exenteration cases in order to allow better observation. This greatly enhanced my experience and allowed and appreciation of the pelvic side wall anatomy that isn't feasible if unscrubbed. Overall I saw 4 complex pelvic exenterations and numerous other major abdominal resections. In addition I observed one of the first TaTME procedures at RPA.

The academic time allocated on Fridays was invaluable to see. Ring-fenced time was important for allowing mentorship meetings with newly appointed Associate Professors from across a range of surgical disciplines and also facilitated strategic meetings with other researchers regarding grant applications, study progress and infrastructure development.

Discussion

I have learned over the years that no matter where in the globe you are, what unites us as surgeons is far greater than what divides us. This extends to all aspects of our profession, both positive and negative. Consequently, I felt immediately at home when, despite my overwhelmingly positive experiences of the institutions I visited, I encountered a barrage of negative stories in the Sydney Morning Herald regarding overstretched hospitals, suboptimal care, and stories regarding the bullying and (sexual) harassment of trainees. It appears that Australia has many similar issues to the UK regarding both its tabloid press and its health services.

Hospitals Patient left in hallway on a drip

24-hour wait to remove stone

Harriet Alexander
Health reporter

An acutely ill woman was forced to wait more than 24 hours in Blacktown Hospital's emergency department until she could have surgery, and administered morphine in a hallway, because no beds were available in the wards.

Kim Hilton, 38, is representative of a western Sydney population that has grown beyond the capacity of hospitals to meet the demand.

She attended the emergency department on August 3 experiencing excruciating abdominal pain, and a scan detected a gallstone.

When she arrived at midday, the waiting room was groaning with patients and although she was admitted within an hour, she was sent back to the waiting room because no beds were free.

A winter surge of people with respiratory illnesses had resulted in 131 presentations to emergency that day.

Health Patient numbers soar 25%

Hospitals stretched to the limit

Amy Corderoy
Health editor

NSW emergency departments are overwhelmed by huge numbers of seriously ill patients, with doctors saying the system cannot cope unless hospitals are given more beds and funding.

The latest report from the Bureau of Health Information shows patient numbers have risen by 25 per cent over the past five years, while the time taken to treat some of the most seriously unwell has increased this quarter.

In some cases emergency patients within four hours – with fewer meeting the target between April and June this year than the same period last year.

The Australian Medical Association NSW said the system is so over-stressed that more hospital beds are needed to ensure patients can be treated on time, particularly in western Sydney.

'Most of the hospitals around NSW, not just in Sydney, are struggling.'

Harassment complaints are 'career suicide' for trainees

Surgeons guilty of bullying and bigotry

A toxic culture bullying in surgery

54%

49%

49%

'This appears to be the single biggest issue fostering continuing poor behaviour by perpetrators, as so few people are prepared to challenge the status quo.' Report

The gender divide

Conclusions

My experiences in Australia have broadened my horizons both surgically and academically. The opportunities afforded to me by the travelling fellowship have helped expand my understanding of the diseases we treat, the infrastructure required to optimise patient outcomes and how to embed academia within complex clinical services. The staff at both units were very welcoming and only too happy to share their expertise and insights – I am deeply indebted to them for their time, patience and wisdom. I feel that I have gained greatly from the experience and as a relatively newly appointed consultant with an academic interest I have been able to acquire career development advice & guidance from some of the most internationally pre-eminent academic surgeons. Without the support of the ACPGBI this would not have been possible.