A Return Visit from Australia

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Dr. Crawford and his wife, Margaret, and his children, Belinda, Jacqueline, Lindsay and Tanya.

In 1982, I moved with my family to Rochester to become a special clinical fellow in anesthesia at Mayo Clinic. This began one of the most rewarding exercises that I have ever undertaken in my medical career. We stayed for just under two and one half years, and at the end of that time, I truly felt that I had participated in every aspect of anesthesia practice at its ultimate level. I felt comfortable that anything I encountered back home in Australia would not present major difficulties.

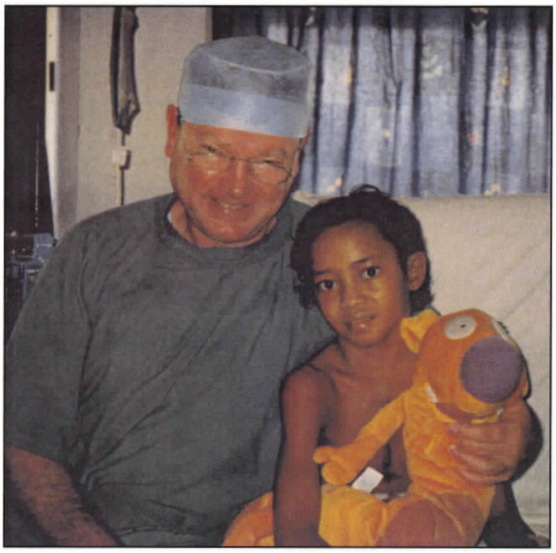
Coming home, I initially acted as the anesthetist to various surgical professors. After a year, I drifted into Critical Care and completed my Fellowship in Intensive Care. Following this, I was attached to the Pediatric Critical Care section and developed high frequency ventilation that I had researched extensively during my time in Rochester. A few years later, we took up the challenge of extracorporeal membrane oxygenation (ECMO) and became a center that accepted very sick neonates with cardio-respiratory problems of all types.

At the time our pediatric cardiac surgical program, then combined with the adult service in one of our sister hospitals, was experiencing some difficulties. It was eventually transferred to the Children's Hospital where I was working. I became heavily involved in the anesthesia and postoperative care of these infants. This was another major learning experience for me. The cardiac surgeon I worked with taught me a great deal, but unfortunately, our association lasted only a year. Our results were less than acceptable, and I felt that I could not continue. The surgeon was asked to stand down, and in an acrimonious separation, we all suffered significantly.

Nothing had prepared me for this, and I thought my chances of ever taking part in pediatric cardiac surgery again had been dealt a fatal blow. The Anesthesia Department in Rochester was quick to become aware of the problem and was very supportive through the process. As luck would have it, a new surgeon was available and ready to take up the challenge. Together, we have spent many years working successfully at the Children's Hospital as well as participating in numerous overseas aid projects, such as Operation Open Heart Program. I feel that I have been privileged to work with him and his successor, both of whom I regard as true craftsmen and with whom I have developed long-term friendships.

Pain has always been an interest of mine, and in the mid 1980s, both the adult and pediatric sections of our hospital supported developing pain services. I initially set up an adult service and some years later the pediatric component. Both sections are now running very well, but my personal involvement in the adult section has decreased over time as I now concentrate on pediatrics and a private clinic that we have developed. Although the public system is finding it increasingly difficult to resource our pain services, particularly the chronic pain section, pediatrics has been spared and this year was given an injection of 3.5 million Australian dollars to further develop pain and palliative care services. As the director of the Sydney Children's Hospital in Sydney, Australia, this injection of funds is truly a blessing.

I still practice in three specialties: anesthesia, intensive care, and pain medicine. As time goes on my role in pain medicine is increasing and anesthesia decreasing. The junior consultants want more and more of the complex pediatric workload that I have been



Dr. Crawford and one of his patients from the Operation Open Heart Program in Papua, New Guinea.

performing, which I don't mind since much of it is after hours and on weekends. Hopefully, I will be able to maintain my cardiac and ENT involvement, but in building a department, one needs to foster young talent. I have been on these rosters for too long, and as our more experienced anesthetists retire, the workload for those remaining is rapidly increasing. Currently, I take call for 13 weekends per year providing neonatal care and a similar amount of the supporting pediatric cardiac patients. Thankfully, occasionally, the rosters coincide.

In April 2007, my wife and I traveled back to Rochester to catch up with old friends that we met during our stay some 25 years earlier. This experience again was quite amazing. I was expecting to find Rochester and Mayo Clinic still doing what it did 25 years ago.

As one drives into the city, one clearly sees that some extraordinary changes have occurred. It soon becomes evident that these changes are a result of the development of the Clinic over the years. The governors of Mayo have predicted the developing nature of health care in the regional USA and have adapted to produce a system that services the community within Minnesota and the surrounding states to the extent that it is now bigger and better than it ever was.

I had expected that, with the establishment of Mayo Clinic Arizona and Mayo Clinic Jacksonville, Rochester would have some difficulty continuing to grow. How far from the truth this turned out to be. Mayo Clinic Rochester now employs 25,000 people whereas in the 1980s it was a mere 10,000. Rochester itself has a population of 90,000 instead of 60,000, and now the major employer is clearly Mayo.

The services at Mayo are still on the cutting edge, and although not significantly different from the services we offer in Australia, the sheer volume of high-end complex procedures carried out is something to behold. The extraordinary becomes the ordinary. This was something that was quite striking in that our system could never sustain such a cost-consuming process. We have a national health system that will provide hospital care for anyone whether they have health insurance or not. Should they be working, they pay 1.5% of their salary toward health care and are entitled to virtually anything in terms of health care except cosmetic surgery.

Patients with private health insurance, about 30% of the population, can have their procedures performed at the time of their choosing but public patients are put on a waiting list. Unless regarded as urgent, e.g. patients needing cancer surgery wait for 6-12 weeks. the wait for orthopedic implants is about 6-12 months, for cardiac surgery 3 months, and for ENT surgery 12-24 months. The private hospital system has targeted the quick turnover procedures as these are profitable, to the detriment of the public system's ability to generate an income. In the private system, cardiac surgery, neurosurgery, and major vascular surgery are offered with intensive care backup. Although these procedures are relatively cost neutral for the private sector, they bring significant prestige to the hospital offering them and help attract patients in the rapid turnover areas.

The public system is designed to never make money and any money it makes is returned to the state's consolidated revenue and not the hospital. The more efficient the public system is in turning over patients, the more cost it engenders. Since both the state and federal governments partially fund the system, they control health expenditure by under funding the system, and blaming each other, until it becomes electorally unacceptable. As such,

health is always a major political football at election time.

Although our system is relatively under funded, we can do what Mayo does but never as much and will never be as good at it. Although our population and medical profession is now becoming more demanding in terms of intensive care resources and an inability to accept death as a satisfactory outcome, we still have not reached the levels seen in the United States. We still run ECMO, but rarely for more than 72 hours or until such a time that the team can be assembled for a concerted effort to wean the patient. Patients have been on support for longer time periods, but the return in terms of good long-term survival have been disappointing. At Mayo, I saw one woman still being supported well after three weeks. This would deal our system a mortal blow as it would prevent us from providing health care to many other seriously ill and potentially salvageable patients.

One of the most appealing aspects of Mayo was the number of lectures and talks given by world experts each week. The ability to attend and discuss various aspects of diagnosis and therapy with them was truly a humbling experience. Since I have a number of interests, I could attend a talk virtually every day.

Anesthesia at Mayo itself has continued to develop in line with other growth at the clinic. The computerized, paperless system seems to have cost an arm and a leg to develop, but is certainly producing results in terms of availability of information regarding a prospective customer. Anesthesia's ability to interact with it has been refined to such a point that it is now user friendly. It has the ability to rapidly search patient records. In allowing retrospective chart review to be performed quickly and easily, it was something to behold. All I can hope is that systems being developed by our state government will incorporate some of Mayo's versatility and flexibility at a fraction of the cost, but alas I fear (know) that will not be the case.

For those practitioners interested in regional anesthesia, a visit to the Orthopedic Section at Rochester Methodist Hospital is worthwhile. Here the proponents of both nerve stimulation and ultrasound can be seen at work, displaying their knowledge and skills. Ultrasound is promising, but I am yet to be convinced that it will offer a lower complication rate compared to other methods already available. It is certainly a great teaching tool and impressive to watch with a good practitioner.

Simulation is said to be the teaching tool of the future, and Mayo is right there with its own center. Anesthesia has a designated area set up just like any operating theater within the clinic. It has the ability to train residents in crisis management or situations such as weaning from bypass. The facility is by far the most sophisticated I have seen and an absolute pleasure to explore. A visit to the clinic is not complete without a session there. What impressed me most was the time allowance given to trainers to devote their energies to the system without it being regarded as something additional that they do on top of their clinical work, as is often the situation here.

My recent visit to Mayo Clinic Rochester proved more valuable than I had expected, and certainly something I would consider again in a few years time. I would urge other ex-trainees to do the same, as the place is still impressive and has something powerful to offer that we are most unlikely to find in our own institutions.

I would like to thank the staff within the Department of Anesthesia at Mayo Clinic Rochester for their great kindness and consideration in looking after both myself and my wife, Margaret, during our stay.