# New services for Myanmar

Experience for a Rowan Nicks Scholar has led to a new cardiac unit in Yangon Children's Hospital

Win Win Kyaw operating with Bruce French assistin

Rowan Nicks International Scholar from Myanmar who received training and mentoring in Australia in 2010 has recently led the development and opening of a desperately-needed new cardiac surgery unit in Yangon.

Dr Win Win Kyaw was a consultant cardiovascular surgeon at the Yangon General Hospital at the time of her arrival in Australia and spent her time here on attachment to the Cardiothoracic Surgery Unit at the Liverpool Hospital in Sydney under the mentorship of cardiothoracic surgeon Associate Professor Bruce French.

The main objective of her three-month visit was to improve her skills in surgical leadership. Dr Kyaw attended administrative and management meetings at Liverpool hospital, theatre staff debriefings and team consultations and was a participant of the 2010 "Surgeons as Teachers Course" held in Adelaide. She was introduced to surgical audit and was assisted in constructing a database relevant to the needs in her Yangon surgical unit. Dr Kyaw also had the opportunity to assist in open heart surgery cases and to attend related clinical meetings.

On her return to Myanmar, Dr Kyaw resumed her position as second in charge of the cardiovascular unit at Yangon General Hospital until she was asked to set up a new adult cardiac unit at the Yangon Children's Hospital.

Dr Kyaw spent six months planning the design and operation of the unit, built a team, trained operating theatre, intensive care and ward staff and designed computerised patient data records.

Myanmar is the largest country in South-East Asia with a population of almost 60 million people, but is so underresourced that only hundreds of cardiac surgeries are carried out each year, despite an enormous need because of rheumatic fever, congenital heart disease and acquired cardiac disease.

Professor French, who mentored Dr Kyaw after first meeting her during an Operation Open Heart\* visit to the country in 2006, said the opening of her new



Archive photo of Win Win Kyaw and Supervisor Bruce French with Rowan Nicks.

unit will have a tremendous impact on the quality and availability of surgical treatment for people with cardiac disease.

"Yangon and Sydney have similar populations, yet Sydney has eight or nine cardiac units which conduct around 4000 surgeries per year while Yangon has two hospitals conducting only around 300 procedures," he said.

"That shows the need just in one part of the country. In Mandalay, Myanmar's second city, and other centres the need is even greater.

"Such is that need that health authorities asked Dr Kyaw to establish a new cardiac unit where she could treat adults within the children's hospital and she has done an amazing job building a team, training staff and setting up systems to monitor patient outcomes which is still not common in Myanmar."

Professor French, who has a particular interest in surgical training and skills transfer, is attached to the University of Western Sydney and the University of New England and has been a member of the Rowan Nicks Scholarship Committee for the past two years.

So far he has made 12 visits to Myanmar since his first in 2006, using each one to facilitate safe practices in coronary by-pass surgery and teach new skills and techniques to local surgeons.

"I see my role as a facilitator in the development of new techniques rather than the primary surgeon on these visits because the key is to enable the surgeons to safely undertake procedures when visiting teams are not there," he said. "There is such need in Myanmar that the impact of an Operation Open Heart visit in terms of patient numbers is negligible while the up-skilling, mentorship and support of local surgeons is, in my opinion, invaluable."

#### Leadership qualities

Professor French said Dr Kyaw was a junior cardiovascular surgeon when he first met her during a team visit to Yangon General Hospital and over the following years found her to be a committed and careful surgeon with leadership qualities recognised by local health authorities who sent her to Mandalay to help establish an open-heart surgical unit.

He believed she demonstrated those qualities envisioned by the late Rowan Nicks when he established the scholarship to support surgical leaders in developing countries and the committee agreed.

As the then Clinical Director of the Cardiovascular Clinical Stream of South West Sydney, Professor French agreed to be her mentor during her stay in the country.

"The key to me was providing Dr Kyaw with ideas during her time here rather than technical skills," he said.

"Therefore we discussed ideas around leadership, communication, dealing with stress, surgeons as team leaders and team dynamics.

"She attended meetings with me to see the administrative and management interaction as well as patient interactions via consultations in my rooms.

"I was also keen to offer her exposure to the multidisciplinary team element of cardiac surgery where surgeons, perfusionists, anaesthetists and theatre staff all work very closely to ensure the best possible outcome for our patients.

"We also often debrief after stressful situations in theatre and Dr Kyaw attended one of those after we lost a patient in theatre who had come to us in very severe distress.

"The cardiac surgical environment can be a very stressful one and those stressors need to be addressed and managed, particularly for those surgeons asked to take on leadership roles.

"Cardiac surgeons are not the emotionless god-like figures of yesterday and I wanted Dr Kyaw to see not only how we addressed these issues, but that we did address them before she returned home and was asked to take on more responsibility."

Professor French said he had also given Dr Kyaw basic software, modelled on a data-base used at Liverpool Hospital, to help her monitor patient numbers, outcomes and mortality rates given that such systems are not widely used in Myanmar.

Having last visited her in February this year, during a week-long visit at the new cardiac unit at the Children's Hospital, Professor French said he was extremely impressed with her progress.

"Dr Kyaw is now leading a team conducting coronary by-pass surgery and heart valve surgery and her technical skills are more advanced in this new environment while her leadership and management skills are very good.



Win Win Kyaw with cardiologists on the surgical ward.

"She is now the lead surgeon with two junior surgeons working with her and they are tracking patient results which is a useful exercise in rigour while providing the information needed to demonstrate that they are doing useful work.

"She is also looking to learn paediatric heart surgery because of the high number of children born with congenital heart disease and I am hopeful she will be supported in this so that her skills can continue to expand given the enormous need for them in Myanmar."

Professor French described Dr Kyaw's achievement as of great value to the country and said she epitomised the type of surgeons Mr Rowan Nicks was hoping to assist when he set up his scholarships.

He said he remained in close contact with her via email and had found the experience as mentor to an international scholar an extremely rewarding one.

"I found this an invaluable experience as a surgeon interested in skills transfer and teaching while it also added meaning to my life on a personal level and I would thoroughly recommend taking on such a role to any surgeon wanting to help build a surgical service in a less fortunate country or even here at home," he said.

Operation Open Heart is an arm of the Sydney Adventist Hospital's Healthcare Outreach Programme and the Myanmar component was developed in 2003 by Professor Alan Gale.

Professor Gale, an Australian cardiothoracic surgeon currently in Queensland, mentored the first Rowan Nicks scholar from Myanmar, Dr Khin Maung Lwin, at the Prince Charles Hospital in 2005. Dr Lwin is now the head of cardiovascular surgery at the Yangon General Hospital.

Professor Gale has been awarded the College's International Medal in recognition of his humanitarian and mentoring work in the South Pacific and in Asia. **With Karen Murphy**  Aside from the ASC

# A number of new initiatives are being introduced in New Zealand

t was New Zealand's pleasure to be the host country for the 2013 Annual Scientific Congress. The scientific program was of a very high standard and it is just a pity that the same can't be said for the weather! I would like to take this opportunity to publicly thank all of the New Zealand surgeons (and the Trainees) who gave so much of their time to develop the programs and help to make this a successful event.

There are a number of initiatives under way in New Zealand with the intention of improving patient care and medical training and education. Just a few of these have been highlighted below.

## Medical Council of New Zealand proposed changes for PGY1 & PGY2

In the second round of consultation with the profession on training in prevocational years one and two (PGY1, PGY2), the Medical Council of New Zealand (MCNZ) has indicated its preference to continue with three-month runs enabling registration in general scope at the end of the first year. It is envisaged that all runs (including relief runs) will have components which will contribute appropriately to the new graduates ongoing training and education.

These doctors will be required to have a Professional Development Plan throughout these years and the move to general scope registration will be contingent upon a Plan having been developed for PGY2. MCNZ's objective is to ensure all doctors have a broad basic training, including some exposure to community medical practice, and to enable progression into subsequent postgraduate programs.

While the proposed changes have the potential to offer improved experience and training for interns this is dependent upon District Health Boards (DHBs) recognising the importance of training as well as service commitments whereby the quality of each attachment can be improved. There is an associated expectation that senior medical staff, as key participants in this process, will make a more significant contribution to both training and regular assessment of the intern working with them. This increased expectation will come at the cost of some decreased productivity; and that can be expected to have a significant impact upon those DHBs that are already struggling to meet Ministry of Health targets.

### Shared health record

Work is progressing remarkably efficiently as New Zealand moves towards a goal of a shared, widely accessible patient health record by the end of 2014. Numerous separate items contributing to patient care have been developed and refined and are already in increasing clinical use. This includes medicines reconciliation, electronic prescriptions, maternity record, electronic referral and discharge communication, electronic transfer of patient's records between practices, needs care analysis of the elderly (InterRAI) and widespread access to laboratory and radiological investigation. A new patient and provider health index database is replacing the existing 30-year-old system which has had a 10 per cent duplication rate.

All these components will be linked through a single portal through which the patient and their health care providers will have a variable level of access to the information available. There are four hubs nationally (three in the North Island and one in the South Island), each with regional populations of approximately 1,000,000, where this information will be shared through a central repository. The four hubs will be linked nationally so that healthcare providers will, depending upon their authorisation, have access to some/all electronic information in respect to the care of each of their patients.

Considerable work has been undertaken in the development of a shared care plan, which will be available on the patient portal and capable of constant updating by all health care providers and the patient. It is anticipated that shared care plans will be developed for patients who, because of the complexity of their illness or disability, require repeated interaction with a range of health care providers.

Consumers/patients have been widely involved in the development of this IT work and are extremely supportive while emphasising the need for patient confidentiality and security of information. This aspect has been carefully considered at each stage of the development and there has been good assurance (although obviously never absolute) that this can be ensured. The potential power and utility of this IT support is becoming increasingly evident as clinicians access a diverse range of information in respect to their patients. The full integration in the near future represents an exciting prospect.

This initiative has been developed from bottom-up, and been driven by clinicians (including the EDSA, NZ, Allan Panting) working alongside IT vendors and consumers. The costs, when compared with those of some other international health systems, have been comparatively modest.

#### Surgical site infection

It is recognised that surgical site infection accounts for approximately 20 per cent of all hospital acquired infections. On average patients spend an additional seven days in hospital at an average cost of \$1000 per day and with significant additional costs following their discharge from hospital. Deep infection following hip and knee replacement surgery frequently results in repeat surgery on one or more occasions and, not infrequently, complex revision surgery. In these instances, the total costs are frequently several times the cost of the primary arthroplasty (approximately \$20,000). Therefore, a reduction in the incidence of surgical site infection has the potential to permit additional funding to be directed to primary surgery and the treatment of more patients.



At the end of March, under the auspices of our Health Quality and Safety Commission (HQSC), prospective data collection in respect to deep infection following hip and knee arthroplasty commenced in eight of New Zealand's 20 DHBs. After identifying and removing any difficulties with data collection it is anticipated that the remaining 12 DHBs will be participating also from the beginning of July. The consistent collection of this data will permit the accurate determination of the incidence of serious deep infection following major joint arthroplasty. The recognition of any variance across the country will result in closer scrutiny to identify any differences in the perioperative care which may be contributory factors; and hopefully result in changes in practice that can lead to a reduction in the rate of infection.

This initiative is the first in a series to collect accurate data in respect to surgical site infection following elective procedures across New Zealand. Allan Panting (EDSA, NZ)) represents the College on the HQSC group developing this program. Once it has been introduced successfully for these arthroplasty procedures, consideration will be given to auditing cardiac surgery and caesarean sections in a similar manner. Further surgical procedures with sufficient volume, whereby the data can achieve statistical significance, will be included subsequently. While initially data collection will be a mixture of web-based and hardcopy, it is anticipated that this will move quickly to electronic entry at all sites once the IT support has been further developed.



*Scott Stevenson Chair, New Zealand National Board*