RACS GLOBAL HEALTH

A COLLECTION OF STORIES: 2013-2015

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

WELCOME

A MESSAGE FROM PHILL CARSON, CHAIR OF THE RACS GLOBAL HEALTH COMMITTEE

It is with pride that I introduce the third edition of RACS Global Health "A Collection of Stories".

In the three years since publishing the previous edition, many exciting developments have taken place, and it has certainly been an incredibly busy and productive time. The wonderful work of our volunteers has, as always, been integral to the success of our activities, and this magazine is in large part a celebration of their dedication and unwavering belief and commitment to the life-changing work that we do.

The last time this magazine was published in 2012, our activities were managed by what was known as the "International Projects" department of the College. The name shift from "International Projects" to "RACS Global Health" in 2014 was a natural progression to reflect our growing voice and advocacy at an international level, in the global health space.

Under the leadership of our current President, Professor David Watters, OBE, and in partnership with global advocacy organisations and specialist colleges throughout the world, RACS has played a key role in raising the profile of safe surgery and anaesthesia as vital components of health care. Our goal is that safe surgery and anaesthesia be available and accessible to everyone who needs it. This includes the surgical care necessary for the management of complications of pregnancy, and the care of victims of trauma.

In 2013, the Lancet launched a Commission on Global Surgery, with the explicit goal of promoting this agenda. An enormous leap forward was achieved when, in May 2015, the 68th World Health Assembly of the World Health Organisation unanimously voted to adopt the first ever resolution on strengthening emergency and essential surgical and anaesthesia care. This resolution formally recognises the essential role of safe surgical care and anaesthesia in achieving the Sustainable Development Goal: *Universal Health Coverage,* by 2030.

The October 2015 Global Health Symposium, a joint venture between the RACS and Lancet Commission on Global Surgery will bring together key leaders, policy makers and health practitioners from Asia Pacific countries to develop a roadmap to improve access to affordable and safe surgical care across the region. RACS is committed to supporting the Ministries of Health in low and middle income countries in our region to incorporate these essential services into their national health plans. We believe that all of the regional specialist colleges have a leading role to play to make this a reality, and the aim of the Symposium is to initiate this conversation.

While our Executive continues this important advocacy work at the policy level, RACS Global Health projects continue to provide clinical and hospital systems training and mentorship to doctors and nurses, and deliver essential medical services to communities throughout Timor Leste, the Pacific Islands, Myanmar, Indonesia, Cambodia and Vietnam, who would otherwise be unable to access specialist care.

The focus of RACS Global Health activities is shifting increasingly towards a sustainability model. The RACS Pacific Island Program (PIP), which this year celebrated its 20 year anniversary, is one of the great examples of our regional capacity building activities. At its inception, the PIP had no funding allocated to training, and now almost every PIP activity has an education, training and capacity building focus.

Similarly, the RACS Global Health programs in Timor-Leste are increasingly focused on education and training, developing and delivering post-graduate medical education and training programs and working closely with the national hospital to develop, support, and embed effective hospital systems.

The College's East Timor Eye Program (ETEP) is training the first generation of eye health workers in Timor Leste, with the first cohort of trainees currently completing the post graduate diploma in Ophthalmology.

In partnership with the Myanmar medical societies, the RACS Global Health Scholarship Program has announced the establishment of a new scholarship for Myanmar doctors, with the first recipients due to arrive in Australia in 2016.

Following the successful training of the first ever group of Myanmar doctors in Emergency Medicine in 2012-2013 under the College-supported *Emergency Medicine Development Program*, the second cohort of national specialists successfully completed the final exam of the 2nd Post-Graduate Course in the Diploma of Emergency Medicine at University of Medicine (1) in Yangon, Myanmar in 2015. This will expand the pool of national doctors trained in emergency medical care and result in improved access to quality healthcare for the Myanmar community.

I hope you enjoy and are inspired by the stories presented within. It's been an incredible journey to get to this point, and to be able to share these achievements with our volunteers, supporters and colleagues is wonderfully rewarding.

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Photo: Ellen Smith

UNIVERSAL ACCESS TO SAFE, AFFORDABLE SURGICAL AND ANAESTHETIC CARE WHEN NEEDED

AN ESSENTIAL, BUT OFTEN FORGOTTEN COMPONENT OF HEALTH CARE IN THE DEVELOPING WORLD

Safe surgery and anaesthesia are vital to effectively treat much of the global burden of non-communicable diseases and injuries and contribute to the provision of safe child-birth where complications arise. Yet an estimated five billion of the world's population are unable to access safe surgery when they need it, and only 6% of the 313 million procedures performed annually are done in the world's poorest countries. Access is defined by four criteria: safety, affordability, timeliness and capacity to deliver, the lack of which means 16.9 million lives are lost each year. These deaths represent 32.9% of annual global mortality.

The major barrier to the delivery of essential surgical services in many low and middle income countries (LMICs) is the perception that surgery is unaffordable and too complicated to include in public health strategies. This has resulted in a historical lack of global and national policies promoting safe surgery and anaesthesia and a failure to develop the staff, infrastructure and capacity to deliver emergency and essential procedures. In fact, recent work by the Lancet Commission based on the New Zealand procedures database, suggests that almost 30% of all conditions require surgery and anaesthesia. The treatment of most surgical conditions does not necessarily require complex surgical skills or equipment, and in some parts of the world, particularly Sub-Saharan Africa, trained providers of surgery and anaesthesia need not always be doctors or specialists. Safe surgery and anaesthesia can be delivered cost-effectively in low and middle income countries, but requires at least 20 surgery,

anaesthesia and obstetric trained providers per 100,000 population.

The evidence base for emergency and essential surgical care being necessary for any health system is sound. The Global Initiative for Emergency and Essential Surgical Care (GIEESC) has succeeded in translating it into policy with the help of many countries, together with Colleges, Societies and NGOs representing surgeons and anaesthetists. In 2015, the Millennium Development Goals, which did not mention surgery, will be replaced by the Sustainable Development Goals. The health goal, Universal Health Coverage by 2030, includes surgery and the reporting of surgical indicators – a big win for all those people needing essential, safe surgery. A WHO World Health Assembly Resolution on strengthening emergency and essential surgical care was passed by 194 member states in May 2015. This resolution was critical because Ministers of Health are guided by the recommendations of the WHO when implementing healthcare decisions for their country. It will require significant and sustained political commitment and substantial investment of resources by individual countries, to put policy into practice and improve surgical care at the country and regional level.

In late 2013 the Lancet launched a Commission into Global Surgery with the goal of promoting Universal Access to safe, affordable surgical and anaesthesia care when needed where access encompasses safety, affordability, timeliness and capacity to deliver.

Countries need to work towards sustainable financing of surgical services. Current estimates in LMICs suggest 33 million individuals face catastrophic health expenditure due to payment for surgery and anaesthesia each year and a further 48 million are impoverished by additional costs from transport, food or loss of earnings.

Improving access to, and the quality and safety of surgical care requires resources (equipment and trained personnel) and hospitals that are well managed so that their capability is deliverable 24/7. First level hospitals in LMICs need to have the capacity to perform a basic package of surgical procedures. They need trained providers in surgery and anaesthesia. In some countries, this may mean task-sharing with clinician non-doctors, provided these clinicians are able to provide an extended scope of practice, are accredited through appropriate training, and are working in a supported, supervised system of care, with the ability to refer. Surgical and anaesthetic care must be integrated into the whole health system.

With expert input from Harvard Business School, the Commission calculated that the scaling up of surgical and anaesthesia care in 88 LMICs will cost approximately 350 billion dollars. This will provide 143 million additional procedures annually with a target of a minimum operative volume of 5000 procedures per 100,000 people by 2030. Although the financial cost of surgical expansion is significant, the cost of inaction on national incomes is much greater. The lost output (total GDP losses) will cost LMICs a total of $12.3 trillion dollars by 2030, or reducing annual global GDP growth as much as 2%.

Although substantial investment in boosting the size and capacity of the surgical workforce and infrastructure is required, the GDP gained will progressively enable LMICs to invest in their own healthcare. A growing global economy, not impaired by lack of access to surgical and anaesthetic care, will benefit all countries and trading partners, not just the current LMICs. The financial and economic projections show that we can't afford not to address this need and make the necessary investment.

On 26 October 2015, the Royal Australasian College of Surgeons (RACS) and Lancet Commission on Global Surgery will convene a Global Health Symposium in Melbourne. The event will bring together health ministers, health practitioners and leaders from the Asia-Pacific and professional medical colleges to develop a roadmap to implement these recommendations in the region. Surgery is an indivisible, indispensable part of health care and is essential to universal health coverage. Investment in surgical and anaesthesia services is affordable, saves lives, and promotes economic growth. We must all work together to make the vision of Universal Access to safe, affordable surgical and anaesthesia care when needed, a reality.


Photo: Ellen Smith

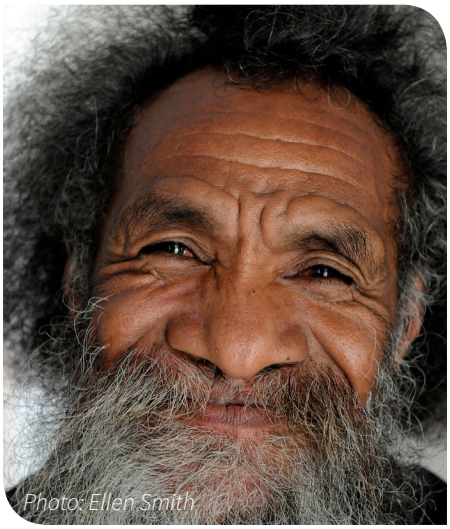


Photo: Ellen Smith


Photo: Ellen Smith

THE **MANAGEMENT OF WOUNDS** IN DISASTERS

SET OF GUIDELINES DEVELOPED BY THE COLLEGE TO ASSIST FIRST RESPONDERS WITH THE INITIAL MANAGEMENT OF WOUNDS

Ine 2014 the College developed a set of guidelines to help first responders and health care personnel with the initial management of wounds to prevent infection and further tissue loss. It highlights the risk of contamination and sets out a step-by-step guide to safely manage wounds.

The guidelines are in the form of an illustrated poster, which is available as a free resource for health care workers globally. It is specifically directed at doctors in isolated healthcare environments.

Wounds should not be primarily closed in the setting of a disaster. Sadly this has often been done by those responsible for the primary assessment and care of wounds in their efforts to help. These sutured wounds have then become infected, with consequent tissue loss, sometimes also limb loss, considerable morbidity, prolonged disability and some threat to life.

The problem was recognised by surgeons attending a disaster a few days after the initial treatment and misguided closure of contaminated wounds. A/Prof Rob Atkinson FRACS and the Trauma Committee referred the matter to the International Committee to see what could be done. The result is an internationally agreed consensus on how wounds should be managed in disasters. A poster for distribution by national surgical societies and colleges was launched at the College's Annual Scientific Congress (ASC) in May 2014. It highlights the risk of contamination and sets out a step-by-step guide to cleaning, debridement and dressing the wound in preparation for delayed primary closure, or further exploration in complex cases, by skilled surgeons if required.

The consensus was reached during the Global Burden of Surgical Disease Symposium at the College in 2012. It has been subsequently discussed in meetings of surgical colleges worldwide and has resulted in considerable interest and enthusiasm for its message and support for its distribution. The poster is co-badged with several international colleges including the American College of Surgeons, College of Surgeons of Indonesia and the Philippine College of Surgeons.

The poster is being used as a tool for promoting education about optimal wound management and for field-based guidance in the acute aftermath of a disaster. It is presented as a simple 'A,B,C,D,E,F,G' *aide de memoir* for easy reference and to facilitate recollection.

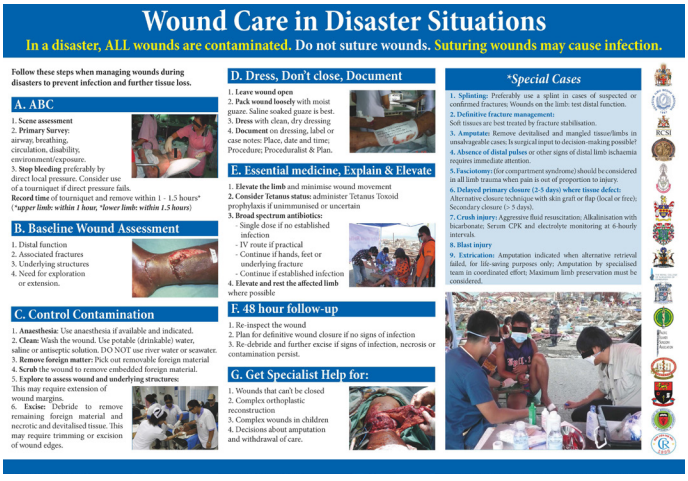
With the support of international colleges and societies, the poster is being distributed to hospitals and health clinics in developing countries and disaster- prone regions. It could also be included in disaster management equipment packs and in emergency care facilities during disaster situations. The poster has been translated into French, and an editable version can be made available for translation into other languages and modified for local use if necessary.

The development of the poster was a result of a study on wound management in disaster settings, conducted by Dr Prasit Wuthisuthimethawee, et al and presented at the Wound Management Consensus Meeting during the Global Burden of Surgical Disease Symposium.

The results of the study are presented in an Open Access article, 'Wound Management in Disaster Settings' published in the World Journal of Surgery.

Please contact RACS Global Health on +61 3 9249 1211 or global.health@surgeons.org to receive a free electronic copy of the poster. It is also available for download on the RACS website.

Below: Wound Care in Disaster Situations poster



Foundation for Surgery

Passion. Skill. Legacy.

The Foundation for Surgery actively supports innovative surgical research, aid projects in underprivileged communities, skills transfer and education programs across our region.

Most of us have a cause that is close to our hearts and that is why the College has, over the years, encouraged tax deductible donations that support specific interests.

The Foundation for Surgery is an integral part of this vision, enabling the broader community to support projects aimed at promoting the health and well-being of those in our own community and in disadvantaged communities in South East Asia and Pacific Island nations.

Making a Donation

You can donate to the Foundation via the Royal Australasian College of Surgeons' Webstore on the College website. Alternatively, donations can be posted along with our donation form, available for download on the Foundation for Surgery page of the College website.

www.surgeons.org

All donations are tax deductable within Australia and New Zealand.

Indigenous Health

The College has set itself the strategic challenge of raising funds for Indigenous health to support the delivery of surgical services in Indigenous communities. Through its Indigenous Health Committee, the College is identifying suitable projects, engaging key stakeholders and ensuring the government is listening to the needs of our Indigenous surgeons and their communities.

RACS Global Health

RACS Global Health provides specialist medical education, training, capacity development and medical aid to eighteen countries in the Asia-Pacific region. Volunteer health professionals provide essential surgical and medical services to people who are unable to access or afford treatment. While working overseas, our volunteer specialists work closely with the national doctors and health staff to share their skills and expertise.

Scholarships

The Scholarship Program funds theoretical and practical research in Australia and New Zealand. Scholarship recipients have expanded fields of knowledge and reinforced high quality healthcare, especially surgical healthcare, for the ANZ community. The Foundation for Surgery has in place a rigorous and merit-based application process to maximise the value of our research dollars. We have the structures in place to further expand our activities to meet the increasing demand for research support.

Australian Aid

TRAINING THE NEXT GENERATION

POST-GRADUATE TRAINING AND EDUATION AT THE NATIONAL HOSPITAL IN TIMOR-LESTE

The Training Centre at the Hospital Nacional Guido Valadares (HNGV), Timor-Leste's national hospital located in the capital Dili, is bustling with noise and activity as junior doctors make their way between tutorials or head into the library to study. In the tutorial room, a class on abdominal trauma delivered by RACS surgeon Dr Raj Singh is winding up. Next door, doctors from across the various departments at the hospital are starting to file in for the fortnightly Grand Rounds – this week being presented on obstructed jaundice by Timorese surgeon Dr Alito Soares, who has recently returned from Fiji following completion of his Masters of Medicine (Surgery), funded by the Australian Government through the RACS Program. In another training room, an English language class is underway, with eight young doctors eagerly practising their new language skills in between tutorials and ward rounds.

Above: Emergency Life Support Training Participants

The HNGV Training Centre, located in the hospital's former operating theatre, also houses the RACS Program Office, where RACS clinicians prepare their lectures and tutorials for the week ahead. The refurbishment of the training centre was an inspired initiative led by Dr Eric Vreede, with funding support from the Navy. A lot has changed since RACS first established the program office in 2001. Back then, the in-country program was made up of an expatriate general surgeon, an anaesthetist and a national program coordinator and was focused on delivering essential surgical services at the hospital following the country's struggle for independence, which had severely affected hospitals and health posts across the small mountainous nation. Regular visiting RACS surgical teams would also come to the national and district hospitals to deliver services to communities who would otherwise not have had any access to these essential services.

15 years later, the RACS team in Dili has grown to include a long term obstetrician / gynaecologist, paediatrician, ophthalmologist, emergency physician and two additional program support staff. It is firmly focused on teaching, training and mentoring the next generation of Timorese doctors in order to increase the number of skilled doctors in the country. A small number of visiting volunteer teams in plastic and reconstructive surgery, ophthalmology, orthopaedic surgery and paediatric surgery (funded by OSSAA, Lions for Sight, Orthopaedic Outreach, Rotary and individual volunteer donations) still make visits to the districts of Timor-Leste to deliver essential services – these teams are accompanied by Timorese surgeons or trainees who learn or consolidate new skills from these experienced teams, many of whom have known them over the course of many years. Dr Joao Ximenes, a Timorese doctor with skills in cleft lip surgery and burns management, has been mentored and guided for many years by visiting Australian plastic surgeon, Mr Mark Moore and relishes the opportunities to further develop his clinical skills during visits by plastic and reconstructive surgery teams.

He says: "I am very happy to be working together with Mark Moore over a number of years now. Together we are able to discuss cases and he shows me new techniques that I am able to practice while he oversees the surgery, which helps my confidence grow".

Since 2012, RACS has been leading the delivery of post

graduate medical education and training in Timor-Leste. Our team worked closely with HNGV, the Ministry of Health and the Universidade Nacional Timor Lorosa'e (UNTL) to develop and deliver an 18-month post-graduate diploma program in surgery, paediatrics, anaesthesia and ophthalmology. It was an exceptionally special moment for all to see nine Timorese doctors don their gowns and caps and graduate with post graduate diplomas in paediatrics, surgery and anaesthesia in November 2014. These doctors are now themselves contributing to the teaching of junior doctors and are skilled and valued members of the hospital's clinical team. As surgical graduate Dr Raimundo dos Santos explains:

"This program prepared me to do things on my own and independently - it has helped me talk freely to the patients. [It] has taught me to be humble and bring myself to the level of the patient so patients can talk to me more openly. [It] also teaches me how to recognise my limitations, come to a point when I have no more options to offer the patient, at that point I should be honest with the patient and tell them we can't do any more and say sorry to them".

At the National Eye Centre (NEC), two trainees undertaking the Post-Graduate Diploma in Ophthalmology (PGDO) are keenly sharing with their peers their experiences from a three month training attachment in small incision cataract surgery at a busy eye hospital in rural Nepal. They look forward to taking their new skills on the road as they accompany the next outreach team on its visit to the district of Oecussi. PGDO trainee Dr Bernadete says:

"I learn a lot from [RACS ophthalmologist] Dr Manoj, because I have begun to assist him with operations. He teaches us how to be a good eye doctor, how we have to see the most common eye disease for Timor-Leste, we have to know what is an emergency case and what is not an emergency case."

Since 2014, RACS has been working with key partners in the health sector in Timor-Leste to deliver a Family Medicine Training Program (FMP) to help train and upskill junior doctors who have graduated through the Cuban medical system. Designed to equip the junior doctors for work in Community Health Centres in rural and remote districts, the FMP is a two-year post-graduate training program consisting of work-based clinical training delivered through rotations in surgery, obstetrics and gynaecology, paediatrics, internal and emergency medicine, and community-based health including short courses in Primary Trauma Care and Emergency Life Support. In 2014/15, 36 trainees completed Year 1 of the FMP. In July 2015, 12 doctors started Post Graduate Diplomas in surgery, paediatrics and anaesthesia, while another two started in Ophthalmology training at the NEC.

In September 2015 the second cohort of 25 trainees started the first year of their FMP. At the same time, 12 doctors started Year 2 of the FMP with community-based rotations in community medicine, family planning and eye health. The RACS clinical team will continue to work closely with their Timorese counterparts to deliver training and to strengthen departmental and hospital systems. Associate Professor Glenn Guest was one of the first long term general surgeons with the program and remains closely involved as the Project Director:

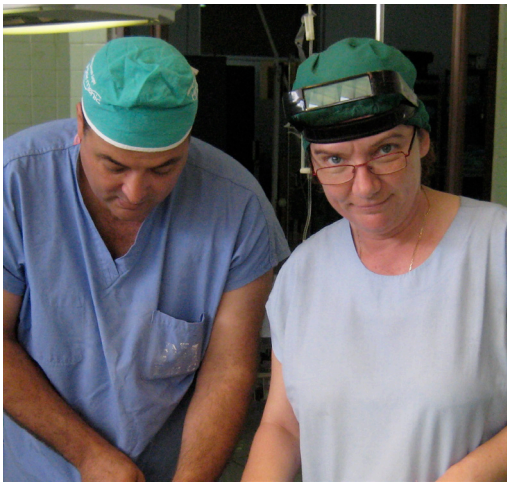
"It has been both challenging and exciting to see Timor-Leste develop its medical capacity over more than a decade. 15 years ago it was completely reliant on outside assistance so it's an amazing achievement to now have a home grown workforce that is delivering much of the basic and specialist care in their country. The current generation of Timorese doctors are not only taking up the challenge of delivering clinical care in their own country but are also involved in the teaching of the next cohort of doctors and thus taking one step closer to increasing independence"

The RACS training program in Timor-Leste is funded by the Australian Government, Lions SightFirst, Eye Hospital Foundation, and many generous individuals and organisations who have supported the East Timor Eye Program.

Below: RACS President, Prof Michael Grigg at the UNTL Graduation Ceremony, November 2015

A CAREER IN **SERVICE**

DR KATHERINE EDYVANE, FORMER RACS GENERAL SURGEON AND LONG-TERM ADVISOR FOR ATLASS AND ATLASS II IN TIMOR-LESTE, DEVOTES CAREER TO GLOBAL AID AND DEVELOPMENT WORK



Above: Katherine Edyvane (right), operating with Cuban specialist in Timor-Leste

In a post-Fellowship career of only ten years, Dr Katherine Edyvane has spent more than half of that time in various aid postings around the world. Since 2006, Katherine has been heavily involved in the College's Timor-Leste activities, significantly contributing to the many triumphs and successes of the Program.

Graduating with a Bachelor of Science (Hons.) from the University of Tasmania, followed by a Doctor of Philosophy (Medicine) and a Bachelor of Medicine and Bachelor of Surgery from Flinders University, Katherine qualified for her Fellowship of the RACS (General Surgery) in 2005.

Having obtained her Fellowship, Katherine immediately threw herself into aid work, volunteering to be the RACS Surgeon and Team Leader in the Earthquake Disaster Response in Muzaffarabad, Kashmir, Pakistan. There she led an all-female surgical team living and working in exceptionally challenging conditions for six weeks.

In 2006, Katherine was deployed to Dili in Timor-Leste for a two-month assignment as the RACS General Surgeon and Long-Term Surgeon Advisor as part of the Australian Government funded *Australia-Timor Leste Assistance in Surgical Services (ATLASS) Program*, a development program focused on training and mentoring Timorese doctors. While working in Timor-Leste, Katherine fell in love with the country and its people. She returned for a two year assignment in 2007, followed by a month-long assignment in 2010, and has maintained strong, long-standing relationships with the trainees (who are now Timor-Leste's newly qualified surgeons) in Timor-Leste. In 2013-2014, Katherine returned to take up the position of RACS General Surgeon and Long-Term Advisor for phase two of the ATLASS II Program. Her Spanish language skills have been highly valued in bridging the gap between the RACS program and the Cuban Medical Brigade in Timor-Leste as well as in communicating with Timorese doctors who were trained under the Cuban medical system. Katherine is regarded highly by the Timorese doctors and nurses she has worked with because of her very generous, caring and warm nature.

Dr Alito Soares, one of Katherine's protégés and now a surgeon at the national hospital in Dili, calls Dr Katherine (as she is known in Timor-Leste) "a very good friend. She was always available for all the surgical registrars and was a very dedicated teacher. I learnt so much from her during my surgical training program".

Dr Raimundo Dos Santos, who worked closely with Katherine as a surgical trainee at the national hospital in Dili, says "she is the best mentor I have ever had in training".

In addition to her involvement in the College's Timor-Leste activities, Katherine was also very active in the organisation *Specialists Without Borders*, volunteering and participating in their surgical education missions to Rwanda and Malawi in 2010, 2011 and 2012.

Australian Aid

EAST TIMOR EYE PROGRAM

2015: AN OVERVIEW

Background

The East Timor Eye Program (ETEP) has made a valuable contribution to developing the eye health system in Timor-Leste since its humble beginnings in 2000. Timor-Leste was a very different place fifteen years ago. The new nation was jubilant to have gained independence from Indonesia, but its systems, infrastructure and services were limited following the long struggle. In July 2000, Associate Professor Nitin Verma responded to a request by the World Health Organisation to provide humanitarian ophthalmic services which were otherwise unavailable to the Timorese population, and ETEP was born.

Given its origin as a humanitarian response program, service delivery was the primary aim of ETEP in those early years. The program focused on the treatment of ocular injuries and performed many sight restoring cataract surgeries, of which there were many given the severe backlog of cataract cases. Initially, services were centred in Dili and many Timorese would travel from the rural districts to be screened and treated by Associate Professor Verma and his team.

In 2005 ETEP was recognised for its role in Timor-Leste's development and was requested by His Excellency Dr José Ramos Horta and His Excellency Xanana Gusmão (both former President and Prime Minister of Timor-Leste) to develop permanent eye care services in Timor-Leste. Since then, ETEP (managed by the RACS since 2000) has partnered with the Timorese Ministry of Health (MoH), the Universidade Nacional Timor Lorosa'e and international NGOs such as the Fred Hollows Foundation New Zealand (FHFNZ), Lions Club International Foundation (LCIF), ProVision, Optometry Giving Sight and the International Centre for Eyecare Education (now Brien Holden Vision Institute) to develop the eye health system in Timor-Leste.

ETEP in 2015

Fifteen years on, Timor-Leste's eye health system is a far cry from where it was in 2000. The young nation has grown and developed, and with it, so too has the eye health system. The focus of ETEP has now clearly changed from crisis response and service delivery to teaching and training the first generation of Timorese ophthalmologists and eye care workers. The vision of ETEP is to handover a sustainable, autonomous eye health system to the MoH by the end of 2017.

This shift from service delivery to training and the aim of self-sufficiency clearly demonstrates the progress Timor-Leste has made. It signifies that the MoH is committed to eye health, and the provision of services is moving from reliance on international visiting ophthalmology teams towards services undertaken by trained and skilled national eye health personnel.

Post Graduate Diploma of Ophthalmology (PGDO)

The PGDO is the first post graduate eye health training program in Timor-Leste and is the primary focus of ETEP. There are currently six PGDO trainees at various different stages of the eighteen month training program, and three are expected to graduate in November 2015. The program hopes to train seven Timorese ophthalmologists by 2018.

Dr Bernadete, PGDO trainee, is passionate about early intervention and Paediatric Ophthalmology, and hopes to use her new skills to focus on these important areas once qualified.

Below: Dr Bernadete Pereira (left) and Dr Julia Magno (right), Post-Graduate Diploma of Ophthalmology trainees recently returned from Myanmar

She says, "I want to prevent blindness by early intervention. I would like to check babies' and young children's vision as soon as possible, then we can save their eyes, save their life".

"I want to prevent blindness by early intervention. I would like to check babies' and young children's vision as soon as possible, then we can save their eyes, save their life"

Outreach Activities

The focus of international visiting ETEP teams is now on providing specialist teaching and mentoring to the PGDO trainees and eye care personnel at the NEC, as well as delivering services and training during selected outreach visits to the country's districts that currently do not receive coverage through the National Eye Centre's (NEC) outreach program. RACS and FHFNZ work in partnership through the NEC in Dili to service the thirteen districts in Timor-Leste so that each district is visited once per year. In 2015, ETEP-led outreach is being provided to the five districts of Suai, Oecussi, Atauro, Maliana and Baucau. These outreach visits are essential to ensuring that Timorese people living in rural and remote areas are provided with the opportunity to access eye health services.

These outreach visits also provide a great opportunity for Timorese eye health workers to be trained and mentored 'on the job'. Ophthalmologist Dr Girish Naidu, who travelled to Suai with the NEC's outreach team in May 2015, explains:

"[Outreach visits] are a great teaching opportunity for [the PGDO trainees] due to the varied pathology seen in a short period of time. Additionally, they can be taught surgical skills in a systematic and safe way."

Ms Lauren Kharsas, an Optometrist funded through a strong partnership with ProVision via the Optometry Giving Sight global initiative, travelled to Ainaro in southwest Timor-Leste in June and commented on the skill level and teamwork shown by her national counterparts:

"It was particularly rewarding to see the high level of competence and teamwork from all of the Timorese eye care workers. I was impressed with their organized structure and generally well-kept paperwork."

Prosthetic Eye Service

The inauguration of the Prosthetic Eye Lab, co-located at the NEC, occurred in late August 2014, enabling prosthetic eye services to be available in Timor-Leste for the first time, supported by LCIF and Perth-based ocularist Ms Jenny Geelan. Mr Filipe Soares, national ocularist, has undertaken an intensive training program in Perth, Bali and Dili over the past two years to gain the skills and confidence to deliver this important service to allow people who have had to have their eye(s) removed to be fitted with a prosthetic eye.

Above: Filipe Soares, National Ocularist

In Australia it can takes up to ten years to become fully qualified and proficient as an ocularist, and Mr Soares will continue to be mentored over the coming years. Mr Soares is the only person in Dili with these skills and is proud to help Timorese in need of prosthetic eyes.

He said "I am really enjoying learning a new skill. No one else in Timor can do this, it's only me."

Vision Rehabilitation

Vision rehabilitation activities have also become a focus of ETEP, to empower individuals who are blind or have low vision with skills and knowledge to independently navigate daily life and be active participants in their communities. An Orientation and Mobility Train-the-Trainer program is a key activity that has been designed to train national Orientation and Mobility trainers with the necessary skills, techniques and expertise to train fellow Timorese with vision impairments.

Orientation and Mobility training doesn't fit into your typical classroom-based training model. The bustling streets of Dili, with their many obstacles and challenges, form the basis for the training. Learning how to navigate the trucks, cars, motorbikes, potholes, disappearing footpaths, street vendors and pedestrians in Dili is no mean feat. Learning all this with no vision, or very low vision, is even more impressive. Various equipment including canes, compasses and electronic travel aids are used to support and guide the trainees' learning and skill development.

"This model is a powerful way of providing job opportunities for vision impaired individuals in Timor-Leste where jobs are scarce"

Felomena de Jesus undertaking Orientation and Mobility Training, Dili Timor Leste

Teaching techniques also differ in this environment as visual aids such as drawings and hand demonstrations are not possible. Trainer Ms Sarah Stodart provided the trainees with an opportunity to understand the shape of the Miniguide's sensor by creating a cone shaped object out of paper so the trainees could touch and feel the shape to gain a visual understanding.

The distinctive thing about this training program is that individuals with vision impairment are being trained as trainers. This is unique to Dili, as elsewhere trainers are often sighted. This model is a powerful way of providing job opportunities for vision impaired individuals in Timor-Leste where jobs are scarce.

The East Timor Eye Program is managed by the Royal Australasian College of Surgeons and is supported by the Australian Government through Vision 2020 East Asia Vision Program, Lions Club International Foundation, and many generous individuals. Key partners include the Eye Surgery Foundation, St John Ambulance Australia, ProVision, Optometry Giving Sight, Fred Hollows Foundation New Zealand, Royal Australian and New Zealand College of Ophthalmologists,

Australian Aid

ETEP
EAST TIMOR EYE PROGRAM

Left: Felomena de Jesus and Sebastio Gavia de Fatima, Orientation and Mobility trainees

EVALUATING RESULTS IN **VANUATU**

EVALUATION OF PIP ACTIVITIES IN VANUATU DEMONSTRATE THE SUCCESS OF THE PROJECT

Left: Baby with cleft lip and palate

The College's Pacific Islands Program (PIP) has been supporting service delivery and training in Vanuatu since 1995. Vanuatu has a population of around 250,000 and a birth rate estimated at 7000 per year, with a GDP of USD 4900 per capita, placing it among the lower middle income nations of the world[1].

Despite this Vanuatu has made good progress towards the Millennium Development Goals, for example the infant mortality rate has dropped from 31/1000 in 1990 to 15/1000 in 2012[2]. The focus of the PIP in Vanuatu has shifted substantially from service delivery to capacity building in recent years, as local surgeons build their skills and take on more complex cases.

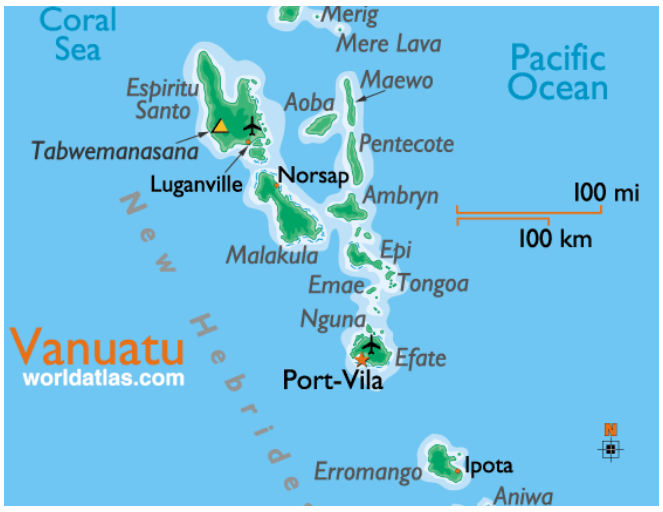
The College has been managing the PIP through the funding support of the Australian Government since 1995. From 1995 to 2014, the PIP has supported 84 clinical visits to Vanuatu covering Cardiac Surgery, Dermatology, ENT Surgery, Ophthalmology, Orthopaedics, Paediatric Surgery, Plastics & Reconstructive Surgery and Urology. These teams have provided specialist treatment and/or advice to 9,214 people.

Given the constraints of funding, it is important for the College to demonstrate the results it is achieving and demonstrate the effectiveness of its programs.

Current best practice evaluation uses a number of methods to allow for "triangulation", which will offset any biases that may affect the validity of the assessment. The survey activities reported from page 16 in this publication are one arm of our evaluation, and provide a rich source of qualitative data. Quantitative data is more difficult to collect and includes scored survey data, data on number and type of cases performed and estimations of Disability Adjusted Life Years (DALYs) as described below.

Plastics & Reconstructive Surgery visits have been delivered in conjunction with Interplast Australia and New Zealand. The majority of patients have been treated for burns or cleft lip and palate (CLP). Recent research aimed to make an estimate of the number of DALYs that had been prevented by surgery provided to these kids.

DALYs are widely used to measure the burden of disease, and disability weightings have been assigned for many conditions, including CLP. After successful surgery, a



residual disability may exist, and the difference between pre- and post-repair weightings over the lifetime of that patient is the number of DALYs averted or prevented by the treatment.

CALCULATIONS SHOW THAT A TOTAL OF 513 DALYS HAVE BEEN AVERTED FOR CHILDREN WITH CLEFT LIP AND PALATE OVER AN 8 YEAR PERIOD.

While the incidence of CLP in Vanuatu is not known, with 7000 births per year[3] we could expect around seven new cases per year. Information and access to surgery remain problematic for people living outside the main island of Efate in Vanuatu. To obtain data for this study, reports from visits between 2006 and 2014 were consulted. A total of 45 patients with CLP have been treated by Interplast/PIP teams, which represents treatment for approximately 80% of children born with CLP.

The next part of our analysis was to make an estimate of the cost-effectiveness of CLP repair for our program. Since information was not available for the in-country costs of each trip (e.g. theatre running costs, staff wages, cost of transport for patients) it was only possible to make this estimate based on the funding for each visit and the proportion of each visit that was spent on CLP patients. The cost of volunteer services provided by medical and nursing staff was also not factored in. While the estimate, therefore, does not represent a true cost for CLP repair, it does allow comparison with other published data.

ON THIS BASIS THE COST PER DALY AVERTED IS AT LEAST AUD97. ACCORDING TO THE WHO COMMISSION ON MACROECONOMICS AND HEALTH, INTERVENTIONS COSTING LESS THAN THE PER CAPITA GDP (USD 4900 IN THIS INSTANCE) PER DALY AVERTED ARE HIGHLY COST EFFECTIVE[4].

Above: Before and after images a cleft lip and palate repair

Even if the value of specialist time was added to this estimate, service provision through this mechanism would still work out to be a cost-effective intervention.

In the current climate of fiscal constraint for foreign aid, it is more important than ever that the College continues to evaluate its programs using a variety of methods. This not only informs stakeholders of the outcomes achieved by programs, but will enable modifications to be made where necessary to ensure programs suitably meet the needs of the countries served.

[1] WHO Country Data Vanuatu : http://www.who.int/countries/vut/en/

[2] UNICEF Vanuatu Statistics , updated December 31, 2013 http://www.unicef.org/infobycountry/vanuatu_statistics.html

[3] UNICEF Vanuatu Statistics , updated December 31, 2013 http://www.unicef.org/infobycountry/vanuatu_statistics.html

[4] Chisholm D, Baltussen R et al What are the priorities for prevention and control of non-communicable diseases and injuries in sub-Saharan Africa and South East Asia? BMJ (2012) 344:e586 doi: 10,1136/bmj.e586

Australian Aid

SURGICAL OUTCOMES IN THE PACIFIC

A REPORT ON STUDIES CONDUCTED FROM 2013-2015

Introduction

Access to safe surgery and anaesthesia when needed is recognised as an essential part of primary health care[1]. Despite this fact, conservative estimates suggest that more than two billion people worldwide lack access to even basic surgical services[2].

For the past 20 years, the College's Pacific Islands Program (PIP) has been working with Pacific governments to improve access to safe surgery and anaesthesia for their people. The program engages volunteer health professionals from Australia and New Zealand to provide essential surgical services and training in surgery and related health fields to 11 Pacific Island nations.
More than 2,700 volunteer health professionals have been involved in delivering clinical service visits through the PIP. This has resulted in the screening and/or treatment of over 83,000 people for surgically related health conditions. This has been made possible through the generosity of health professionals who volunteer their time and skills to deliver activities. The College also acknowledges the important funding support of the Australian Government for this work.

The PIP maintains tools for monitoring the immediate surgical outcomes for patients (one – ten days post-operation). Of the 4,095 surgical procedures performed by PIP teams in the July 2012-June 2015 period, 4091 (99.90%) cases were reported to have satisfactorily recovered post-operation and only 61 (1.49%) of these cases suffered some form of morbidity from which a successful recovery was recorded or expected.

Anecdotal evidence and feedback from Pacific medical personnel suggests that outcomes beyond the one - ten day timeframe have been, and continue to be, positive. The College recognises the challenges faced in obtaining information on patients once they depart health care facilities. This is a challenge also experienced in Australian and New Zealand health systems.

The College has been conducting sample patient follow-up studies since 2013 to document intermediate outcomes experienced by patients. Pacific clinicians have collaborated to survey samples of individuals who have received surgical treatment by PIP teams since 2012 to document information about their quality of health and subsequent quality of life. These activities aim to monitor some of the intermediate outcomes (11 days – 3 years) experienced by patients post-operation.

This report outlines selected results obtained to date from studies conducted between 2013 and 2015. Highlighted questions were selected to convey a balanced and meaningful summary of the large volume to data obtained to date.

Methodology

90 participants were recruited to participate in four studies conducted in the Solomon Islands, Fiji, Vanuatu and Tonga. Participants were recruited within the following parameters: residing within close proximity to the main hospital (usually on the main island), received surgical treatment by a PIP team since 2012, current contact details available to the hospital, and availability to attend appointments at the hospital to participant in the study.

Jayden is a six year old boy who received surgical treatment by a PIP team for an ear and throat condition in 2013. Jayden's mother reported that there has been a big improvement in his condition as a result of the operation and importantly he is able to sleep better and speak more clearly now.

Vanuatu, March 2014

Two evaluation tools were developed for this study. These sought to document both objective assessments of participants' health as well as subjective perceptions of their own health[3].

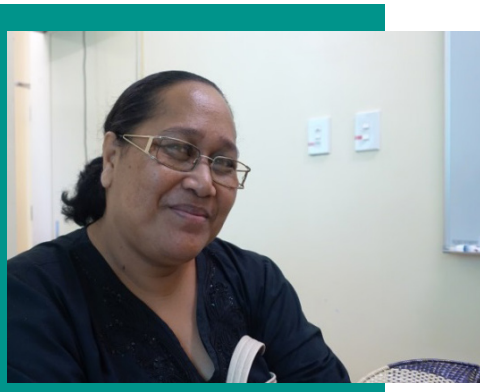
The first tool of 10 questions assessing the clinical outcomes of participants, was administered by Pacific clinicians with notes recorded on paper case record forms. The first part related to healing of wounds, complications sustained, and pre-and post-treatment pain ratings. The second part of this tool recorded the clinicians' assessment of the impact the treatment had on participants' health.

The second evaluation tool used 12 open-ended questions and one closed question. College personnel conducted interviews with 76 patients while 14 interviews were conducted by Ni-Vanuatu clinicians in an outer island which could not be reached by the College team because

of severe weather. This tool was used to discuss the participants' access to services, health conditions for which they sought treatment and changes experienced as a result of treatment. Participants were actively encouraged to exercise their own judgement in talking about their experiences.

Variances are evident in figures presented in some areas of this report as a 100% response rate was not recorded for participants, and some questions were added or modified after initial trials of the tools. Information presented reflects the number of responses given by participants and therefore total numbers of responses are referenced for each question. See Table 1 for response rates per question.

Selected extracts from individual stories are also used to provide depth and content to the relatively small survey. These individuals gave permission for their stories and images to be reproduced.



Uluakimata had been suffering from severe abdominal pain for almost two years when she received surgical treatment in 2013. Uluakimata was the Chief Producer at the Tongan Broadcasting Commission and she felt her problem limited her ability to conduct the field work required for her job. Her problem also affected her family and she wasn't able to help her children with their homework as often as she would have liked. Uluakimata is now pain free and fully recovered from her treatment. She says she now enjoys an excellent quality of life.

Tonga February 2015

Results

TABLE 1: Number of responses per question

No.	Question	Response Rate	
		n	(%)
Evaluation Tool No. 1			
1	Time since surgical treatment	89	(99%)
2	Overall, would you say the surgical was successful in improving the participant's health?	83	(92%)
3	Have the surgical wounds healed adequately?	81	(90%)
4	What level of pain was the participant experiencing before surgery?	79	(88%)
5	What level of pain does the participant experience now?	79	(88%)
6	Please categorise how you assess the participant to have recovered from surgery	83	(92%)
Evaluation Tool No. 2			
7	How did you get to the hospital to see the team?	89	(99%)
8	How long did it take to you get to the hospital?	68	(76%)
9	What was your main health issue prior to surgery?	86	(96%)
10	Quality of Life rating before surgery	64	(71%)
11	Quality of Life rating after surgery	64	(71%)
12	Any positive changes in your life as a result of operation?	80	(89%)
13	How has your treatment affected those around you?	74	(82%)
NOTE: of the potential 90 participants included in activities			

TIME SINCE SURGERY

Participants had generally received surgical treatment 16 days to 26 months prior to the studies.

HEALTH IMPROVEMENT RECORDED

Clinicians assessed surgical treatment as having successfully improved the health of 77 out of 83 participants (93%). Of the remaining six participants:

- Four required further review to complete their treatment or to address a residual health concern
- One suffered a complication she did not expect which prolonged her period of recovery
- One suffered a secondary issue which was suspected to have developed relating to malignancy

WOUND HEALING

Clinicians assessed 80 out of 81 participants (99%) as having surgical wounds successfully heal at the time of the clinical review. The remaining one participant's wound had initially healed however the problem reoccurred and required further treatment

LEVEL OF PAIN EXPERIENCED PRE- & POST- OPERATION

Fifty-nine out of 79 participants (74%) were reported to have experienced pain prior the surgery (22 of whom experienced an extreme level of pain)[4]. In contrast only 15 (19%) were recorded as experiencing any form of pain after the operation (and no cases were recorded with extreme levels of pain).

RECOVERY TIME

Seventy-two out of 83 participants (86%) were clinically assessed as having fully or almost fully recovered from their operation at the time of the clinical review. Of the remaining 11 participants:

- Seven were still recovering after having undergone surgery 16-21 days prior

Pauliasi is a young boy who lives with his family in Fiji, three hours' drive away from the main hospital in Suva. Pauliasi had been in and out of hospital for two years prior to receiving treatment by a PIP team in September 2013. Pauliasi suffered from chronic constipation and suspected Hirschprung disease. During this time Pauliasi's mother had to take significant amounts of time off work to attend appointments and look after him during his frequent hospital admissions. The constant absences from home also caused strain on the family. Pauliasi's parents often had to ask relatives to help take care of their three other children. Pauliasi's mother noted that since his treatment their other children "are happy because we are home full time now, no interruption in our daily routine".

Pauliasi is now able to play with the other kids and enjoys growing up as a healthy young boy. His mother said Pauliasi's treatment "really made a change for my family. We really appreciate the work that has been done on him and we are looking forward to him starting kindy next year."

Fiji December 2013

- Four required further review to complete their treatment or to address a residual health concern

ACCESS TO SERVICES

Forty-four of 89 participants (49%) reached the hospital by car (either private car or taxi). A further 30 participants (34%) reached the hospital by bus or truck. The remaining 15 participants either walked or travelled by a combination of methods such as boat and/or plane.

TRAVEL TIME

Thirty-two of 68 participants (47%) noted that they travelled 10 minutes or less to reach the hospital, 26 (38%) took up to one hour, seven (10%) took one hour or more and three reported that they travelled one day or more to reach services.

COMMON CONDITIONS

When asked to describe the main reason for seeking medical treatment, common responses included urinary problems (22 of 86 respondents, 26%), experiencing significant pain (16 of 86, 19%), hearing problems (nine of 86, 10%), or having been born with congenital deformities (nine of 86, 10%)[5].

QUALITY OF LIFE – BEFORE SURGERY

Fifty of 64 participants[6] (78%) reported they experienced a negative quality of life prior to receiving surgical treatment. This was caused by a range of issues including:

- Being unable to attend school or work
- Being unable to attend to household or farming duties
- Being unable to communicate with others
- Being unable to participate in community activities
- Having limited mobility
- Experiencing anxiety and/or worry

QUALITY OF LIFE – AFTER SURGERY

Sixty out of 64 participants (93%) reported that they enjoyed a positive quality of life after receiving surgical treatment[7]. Of the remaining 7%:

- One sustained a complication she did not expect which prolonged her recovery
- One had a residual health problem which required review
- Two patients had unresolved health issues for which they required further review/treatment

CHANGES AFTER TREATMENT

Seventy-four of 80 participants (82%) identified one or more positive change in their life as a result of surgical treatment. This included:

- Changes in physical functions/physical abilities
- Reduced levels of pain
- Regaining independence
- Returning to work or school
- Improved ability to communicate with friends and family.

IMPACT ON OTHERS

Sixty-eight of 74 participants (92%) noted that their health issues had an impact on others. 35 (47%) noted that their families were happy after the treatment as they were worried, sad, or unhappy before treatment and 20 (27%) noted that their families, friends, or community had to take on additional responsibilities as a result of their health issue. Only six of the 74 participants (8%) noted that their health issue had little or no impact on others.

Nancy had been experiencing health issues for six months prior to receiving surgical treatment by a PIP team in August 2013. She couldn't work or conduct household duties so she just slept and lay in bed. Nancy has made a full recovery since her operation and she now has a market stall selling pudding and fish in a fishing village, which generates an income for her family. When asked about the impact her treatment had on her family, Nancy responded that "they [are] happy because [I am] good now".

Solomon Islands December 2013

Discussion

This information illustrates that good surgical outcomes with minimal complications were achieved for the sample groups. Overwhelmingly surgical treatment also improved both the quality of health and quality of life enjoyed by participants. When considered in relation to the immediate outcomes for the correlating period, data suggests that high quality surgical services are being provided through the PIP and that these results appear to be maintained over an extended period of time. Benefits also commonly extend beyond the individual who received the treatment and provide positive changes for friends, families and/or communities.

In making overall inferences from this data, the College recognises that the sample of patients was not randomly selected. Most of the participants were based in and around the capital cities of respective countries, although some outer island interviews were achieved. Clinical assessment and patient interview questions were also devised to facilitate ease of comprehension if translated or asked of participants with limited English language skills.

A large amount of resources are required to conduct systematic patient follow-up studies. The College recognises its responsibility to complete this where possible and therefore it is intended that future sample studies will form part of its monitoring processes.

This activity was only made possible through the support of clinicians in Fiji, the Solomon Islands, Tonga and Vanuatu. Host nations also provided space in their hospitals and staff to act as translators to facilitate the delivery of the activities.

The College thanks the generous individuals who willingly shared their often emotional stories with survey teams. Their honesty and openness was greatly appreciated.

A further note of thanks must also be extended to all PIP volunteers, past and present, for the hard work and generosity which has facilitated the delivery of specialist medical services to more than 83,000 people in the Pacific. The gratitude conveyed to these teams by individuals surveyed for making their treatment possible has been overwhelming.

Baby Esther was born with severe complications to her bowel system. To save her life she required surgical treatment on four different occasions. A PIP Paediatric Surgery team was required to conduct one of these complex operations. The other three were capably managed by the paediatric surgery team in Fiji, led by Dr Josese Turagava.

Baby Esther's parents happily report that she now has normal bowel movements and is developing like any other baby.

Baby Esther was the couple's first child and they openly admit that the experience was quite traumatic. When Baby Esther was hospitalised both parents slept at the hospital and worked during the day. The father noted that "the lounge upstairs (at the hospital) was 'home' for three months".

Although acknowledging how difficult it was at first, he added "now we are just enjoying every moment we can. We are both working teachers and we just can't wait for every afternoon when we break off from work and rush home."

Dr Josese said "the reality for these parents was that they had death staring at them while the baby was sick and having her back in good health is like a miracle."

Reflecting on the emotional first months of Baby Esther's life, her mother said "we would just like to say thank you for helping us out and also to Dr Josese... perhaps thank you is not enough words. I just pray that you keep doing the good work. Thank you for the blessing. Now I can spend Christmas with my baby."

Fiji, December 2013

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[1]World Health Organization. 2014. 134th Session. EB136/27

[2]Weiser TG, Regenbogen SE, Thompson KD et al. 2008. An estimation of the global volume of surgery: a modelling strategy based on available data. Lancet. 372:139–144. Funk LM, Weiser TG, Berry WR, Lipsitz SR, Merry AF, Enright AC et al. 2010. Global operating theatre distribution and pulse oximetry supply: an estimation from reported data. Lancet. 375:1055–1061.

[3]Testa MA, Simonson DC. 1996. Assessment of Quality-of-Life Outcomes. New England Journal of Medicine. 334(13):835-40

[4]Before and after pain ratings were unable to be obtained for babies born with health issues

[5]Parents described the health issue for babies and small children

[6]This question was added to the survey questionnaire after the second activity

[7]This question was added to the survey questionnaire after the second activity

SURGICAL SAFETY CHECKLISTS

PROMOTING SURGICAL SAFETY CHECKLISTS THROUGH RACS GLOBAL HEALTH AND THE PACIFIC ISLANDS PROGRAM

The promotion of safe surgery and anaesthesia for all is integral to the RACS Global Health mission. In support of this goal, RACS Global Health actively promotes the use of the Surgical Safety Checklist (Australia and New Zealand)[1] through its international outreach programs. As an example of surgical best practice, RACS Global Health volunteer surgical teams systematically implement the Surgical Safety Checklist (Australia and New Zealand) where an alternative version is not in local use. The use of the checklist by RACS Global Health teams provides an opportunity for demonstration and discussion of its effectiveness and adaptability for any surgical context.

The Surgical Safety Checklist (Australia and New Zealand) "identifies three phases of an operation, each corresponding to a specific period in the normal flow of work. In each phase, the checklist helps teams confirm that the critical safety steps are completed before it proceeds with the operation" (RACS 2015). Initially adapted from a similar approach engaged by the aviation industry, the checklist is intended to function as a safeguard against human error and a support to open team communication. For health systems, the checklist offers an adaptable and low-cost opportunity to enhance patient safety.

Surgical safety checklists, with varying degrees of formality, are already used in many locations in the Pacific. In others, formal checklists are not observed to be standard practice. Significant variations in the use of safety checklists are also reported between hospitals within the same country, suggesting the crucial role of hospital administration and senior leadership in promoting their uptake. Where requested, RACS teams have been able to provide advice on adapting the checklist in several locations, and continue to work directly with health personnel on the use and value of the system for improving patient safety and outcomes.

Below: Preparing for surgery during a 2015 PIP visit to Fiji

Dr Jocelyn Christopher, Fijian MMED in Anaesthesia, conducted an audit of the use of the World Health Organisation (WHO) Surgical Safety Checklist at the Colonial War Memorial Hospital in Suva between March 2012 and February 2013. Overall use of the checklist was found to have increased from 26% in April 2011 when it was initially introduced, to 40% in 2012. The audit suggested that some individual checklist items were commonly overlooked such as confirming patient identity, recording consent, procedure and surgical site marking in either 'Sign In' or 'Time Out' stages. Team communication was highlighted as a particular challenge. This included concern that a strong local culture of respect and hierarchy may undermine the open communication the checklist seeks to foster. Nurses may be reluctant to voice concern that something may have been overlooked by a surgeon, for example.

The WHO emphasises local clinical and administrative leadership as key components in the successful standardisation of the checklist (WHO 2014). Staff education and engagement in the adaptation and introduction of a local checklist (and the strengthening of the associated 'safety culture'), and planning its consolidation as a gradual process, are also identified as critical factors in successful adoption (World Alliance for Patient Safety 2008: 21; WHO 2014). National health leaders and leadership in many Pacific locations have or are working on developing their own appropriate system, and managing their introduction and standardisation.

As an invaluable tool for enhancing patient safety, RACS Global Health is pleased to be supporting the standardisation and implementation of the surgical safety checklist in the region.

RACS Global Health activities are supported by the Australian Government and independent donors.

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World Alliance for Patient Safety (2008). Implementation Manual Surgical Safety Checklist. 1st ed. WHO. http://www.surgeons.org/media/19461/WHO_Surgical_Safety_Checklist_Implementation_Manual.pdf

World Health Organisation (WHO) (2014). "Safe Surgery Saves Lives Frequently Asked Questions". http://www.who.int/patientsafety/safesurgery/faq_introduction/en/ (viewed 25 May 2015)

RACS (2015). 'College Resources'. http://www.surgeons.org/member-services/college-resources (viewed 5 June 2015).

[1] Adapted from the WHO Surgical Safety Checklist

Photo: Ellen Smith

Australian Aid

NEW SCHOLARSHIP PROGRAM FOR **MYANMAR**

The College's Foundation for Surgery has agreed to co-fund annual scholarships to enable Myanmar doctors to travel to Australasia to gain exposure to advanced health and hospital systems.

An initiative of the RACS Global Health Committee, the new scholarship will be modelled on the successful Weary Dunlop Boonpong Fellowship Exchange Program for Thai doctors which the College has successfully co-administered with the Royal College of Surgeons of Thailand for more than 20 years.

The Foundation for Surgery has agreed to provide the bulk of the required funding to support the scholarship program with seed funding also provided by local donors in Myanmar.

The College is now in the process of formalising a Letter of Agreement with the Department of Health, Professional Resource Development & Management of the Myanmar Ministry of Health, with the first Scholarship recipients to commence their program in Australia in 2016.

The new scholarship program builds upon the collaboration between the College and the Myanmar Medical Association to initiate Primary Trauma Care (PTC) training in the wake of Cyclone Nargis, which aimed to increase the national health system's capacity to provide effective trauma care to the population.

Since 2009, the PTC Program has trained over 1500 national health providers to deliver basic frontline trauma care, more than 200 doctors have been trained as instructors and 22 senior doctors are being mentored through a Masterclass program, to oversee the longer term sustainability of PTC training in the country. Today the PTC course in Myanmar is self-managed and will soon become a mandatory training component for all medical graduates.

Since 2012, the RACS has worked alongside Fellows of both the Australasian College of Emergency Medicine (ACEM) and the Australian and New Zealand College of Anaesthetists (ANZCA), specialists from Hong Kong and the Myanmar

Recent data from World Bank	Myanmar	Australia
Physicians	17,791	47,875
Physicians per capita (per 1,000 persons)	0.39	2.47
Population (million)	53.26	23.13
Rural:Urban	66.1:33.9	10.0:89.1

Above: Diploma in Emergency Medicine Graduates (EM18)

Ministry of Health to introduce and deliver a sustainable, specialist training program in Emergency Medicine (EM), a specialty and service which did not previously exist as an independent specialty in Myanmar.

In the initial phase of the Emergency Medicine Development Program that ran throughout 2012 and 2013, 18 surgeons were trained as EM specialists and received a Diploma in Emergency Medicine.

A second cohort of eight doctors successfully completed their program in August 2015 A Masters in EM program - similar to the training for all local specialists and led by a local faculty in conjunction with international partners - began in January 2015.

Since the graduation of the first cohort, for the first time, the major hospitals in the three key cities in Myanmar – Yangon, Mandalay and Naypyidaw - now have Emergency Departments led by accredited specialists. These doctors with EM specialist training are expected to be the teachers of emergency medicine and they will help improve the quality of front line healthcare.

The Director of the RACS' Myanmar Program, Dr James Kong, said that with the collaboration over recent years, the College had developed strong relationships with the Myanmar medical leaders. Following discussions with them and hearing of their desire to enable the next generation of Myanmar medical leaders to obtain modern healthcare delivery experience and technical skills from the international community, the College agreed to set up a scholarship program to enable young, promising Myanmar surgeons to obtain exposure

in the Australian system and gain clinical experience and the leadership skills needed to advance the development of modern healthcare in the new Myanmar.

"None of the success achieved so far through the College's Myanmar Program would have been possible without the commitment to build capacity from the College's initial foray in 2009, rather than provide humanitarian aid," Dr Kong said.

"Providing PTC train-the-trainer courses and Master Classes allowed the senior doctors in Myanmar to take ownership of their own training. This approach created the goodwill necessary for all of us from different countries and medical specialties to come to work together there".

"The partnership between the RACS, ACEM and ANZCA and other international colleagues from Hong Kong, Thailand, Malaysia, and Singapore has also been crucial".

"That international collaboration enabled us to formulate and execute EM training in Myanmar within three months of the initial request with a shoe-string budget; an astonishing achievement"!

"We always knew that having international physicians and surgeons flying in and out of Myanmar teaching was unsustainable long term. To be successful we aimed to train a large enough initial cohort of EM doctors to establish the specialty and drive its development into the future".

"I believe that this objective has been met".

"Nevertheless, the provision of effective, quality trauma and emergency care for the injured remains an enormous challenge".

"Myanmar is about the size of NSW with an estimated population of 65 million, so three major hospitals with emergency departments will not have a significant effect in a country where the vast bulk of the population live outside the cities."

The new scholarship program also builds on assistance provided to Myanmar Surgeons through the College's Rowan Nicks Scholarship and the Surgeons International Award Program.During the initial roll-out of the EM training program, the College funded three Myanmar specialists to visit emergency departments and trauma centres in Melbourne, Sydney and Hobart.

Since 2005, the College has supported three Cardiac Surgeons and a Plastic and Reconstructive Surgeon from Yangon General Hospital to undertake advanced surgical and leadership training in Australian hospitals. Two of those Cardiac surgeons, Prof Khin Maung Lwin and Prof Win Win Kyaw returned to Myanmar to take up active leadership roles as Director and Deputy Director of Cardiac Surgery at Yangon General Hospital. With the ongoing support and mentorship of her Australian supervisor, Mr Bruce French, Prof Win Win Kyaw planned the design and led the opening of the first open heart surgery unit in Myanmar in 2012.
The third Cardiac Surgeon and Plastic Surgeon are currently undertaking placements in Melbourne and will return to Yangon next year.

The new scholarships will be awarded annually to one or more qualified health professionals nominated by the Myanmar surgical and orthopaedic societies and Ministry of Health. Recipients will undertake an attachment in an Australian or New Zealand hospital(s) for a period of three to four months.

Administration of the program will be co-ordinated by the RACS' Global Health Department in collaboration with the Myanmar partners.

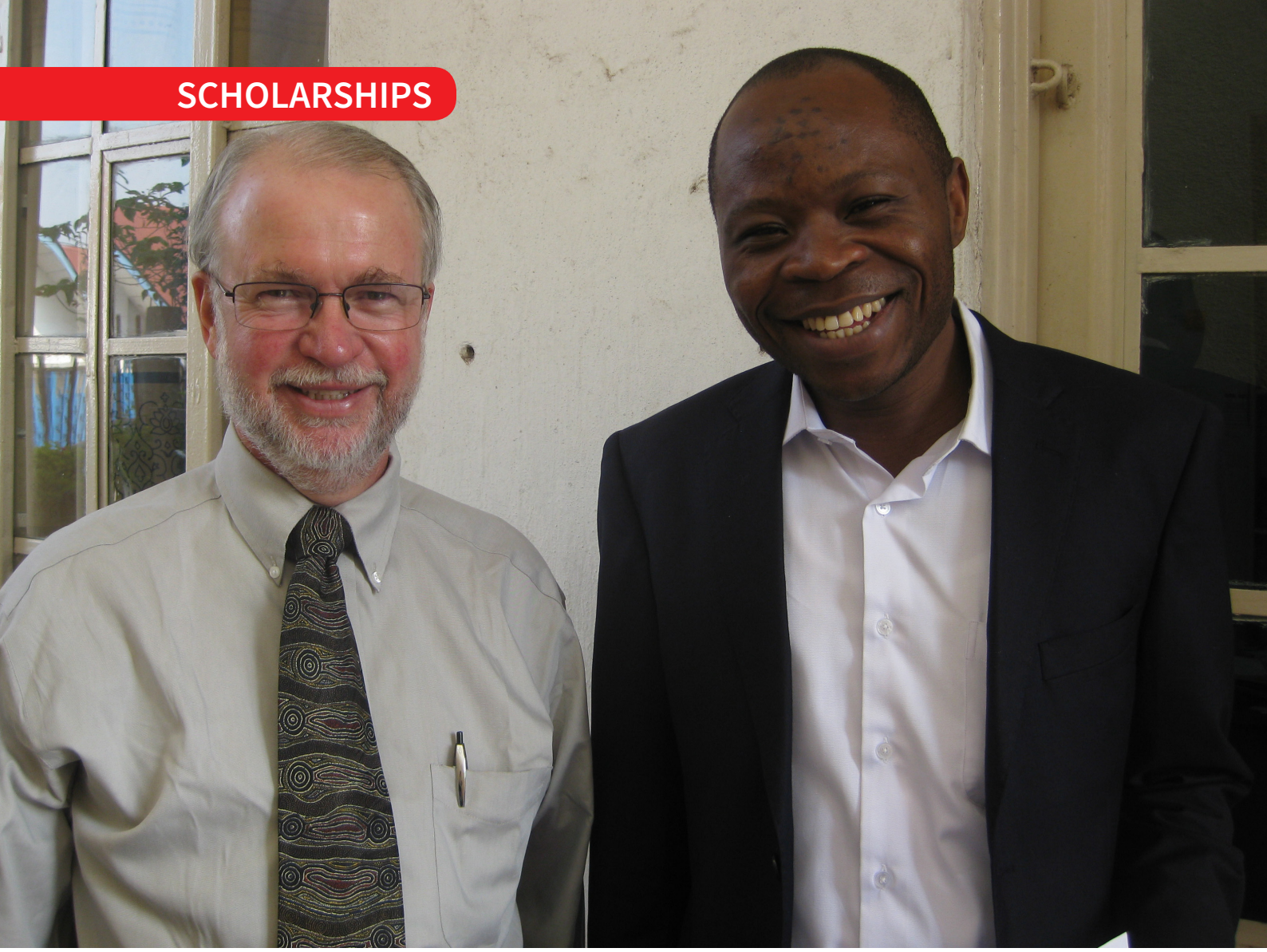
Dr Kong said the main objective of the scholarships was to give Myanmar surgeons exposure to modern hospital systems.

"While some surgeons may use the scholarship to gain advanced surgical training, most Myanmar doctors already have good technical skills," he said. "However, the need to develop and enhance Myanmar healthcare delivery through better systems, processes and management is crucial"!

"With the knowledge gained, they can return to mentor their colleagues and teach their juniors. This is another aspect of capacity building and I believe the potential impact of this scholarship program on the future of healthcare in Myanmar is substantial and will hopefully result in improved access to quality care for the people of Myanmar."

The Myanmar Program continues to support skills development through the provision of the Australian and New Zealand Surgical Skills Education and Training (ASSET) Course, the Advanced Trauma Life Support (ATLS) Course and further PTC Master Classes.

Below: James Kong (left) with PTC Participants



SURGEONS INTERNATIONAL SCHOLAR DR LUC AND SURGERY IN **EASTERN CONGO**

SURGEONS INTERNATIONAL SCHOLAR, DR 'LUC' MALEMO KALISYA AND AUSTRALIAN SURGEON MR NEIL WETZIG ARE MAKING STRIDES TOWARDS IMPROVED SURGICAL CARE IN EASTERN CONGO. ***WITH KAREN MURPHY***

Twelve years after his first visit to the war-torn region of Eastern Congo, in 2015 Mr Neil Wetzig resigned from his position as Senior Visiting Surgeon at the Princess Alexandra Hospital and private practice in Brisbane to give his skills to the doctors and patients at the HEAL Africa Hospital in Goma.

Mr Wetzig and his wife Gwen will now spend up to six months each year working, teaching and training at the hospital, one of only three tertiary referral hospitals in the Democratic Republic of Congo which has a population of 75 million people.

A joint-founder of the AusHEAL charity, established by a small group of Brisbane surgeons to support the hospital, Mr Wetzig has led and organised multi-disciplinary team visits to Goma every year since 2006.

The annual visits have included a Plastic and Reconstructive Surgeon, Oral and Maxillofacial Surgeon, Obstetrician, Uro-gynaecologists, a Radiologist and Sonographer, a Cardiologist, Emergency Physicians, a Dentist, Hospital Administrator, Physiotherapists and specialist nurses.

A General Surgeon with special interests in breast and endocrine surgery, Mr Wetzig decided he could make a greater contribution if he spent more time in Congo and now is a Visiting Surgeon to the HEAL Africa Hospital.

Now back in Australia, Mr Wetzig is participating in advocacy and fund-raising activities for the hospital and trying to organise a future ENT visit.

He said it had been an extremely difficult decision to give up his working life in Brisbane for the highs and lows of life in Africa.

"The Princess Alexandra Hospital has been my medical home for 35 years so it was tough to leave but I decided that if I wanted to work in the developing world it was extremely important that I be young enough, fit enough and still operating well to be of most value to both doctors and patients," he said.

"Living and working in Goma allows me to facilitate more team visits, triage patients in advance of those visits, oversee their follow up care and provide supervision and training for the doctors at the hospital".

"My wife and I spent more than a year thinking about this, including the financial implications, but we decided that it was an experience we would like to share and a journey we would like to take together".

"But it's a tough environment to work in. It's hot and humid, the power supply is variable, the air conditioning in the Operating Theatres quite often fails and the equipment is very basic".

"We don't have reliable diathermy, laparoscopy equipment or even new technologies like harmonic scalpels so virtually all operations are open surgeries".

Mr Wetzig said, however, that three Australian surgeons had donated their personal equipment and he thanked Mr Spiro Raptis, Mr Andrew Bell and Mr Tony Robertson for their generosity.

Still an examiner for the College and the African representative on the College's Global Health Committee, Mr Wetzig and Gwen now plan to stay in Goma for two stints of three months each year, allowing them to return for College exams and the Annual Scientific Congress in May.

In Goma, he works alongside a 2013 recipient of the RACS Surgeons International Award, Dr 'Luc' Malemo Kalisya, Director of Surgery at the HEAL Africa Hospital. Under the Surgeons International Award, Dr Luc spent four weeks at the Princess Alexandra Hospital observing procedures he wished to learn.

Dr Luc is one of only two local general surgeons working at the 197-bed facility and one of six qualified surgeons in Eastern Congo which has a population of approximately 30 million people.

Mr Wetzig said he had forged a close bond with Dr Luc during his visits to Goma and that the decision to spend more time there had been driven by a desire to help him in his efforts to improve patient care and the training of junior doctors.

He also said that the creation of a fragile peace in the region had created new challenges for the hospital and for Dr Luc and his recently trained colleague, General Surgeon Dr Medard, who has been mentored by Plastic Surgeon Mr Paul Millican.

"The region is more peaceful than it was, with most of the rebels defeated and while you can travel around Goma quite safely, there are areas outside the city that are still quite dangerous," Mr Wetzig said.

"Yet this peace means that the HEAL Africa Hospital is now seeing patients with advanced pathology coming in, because it is safe for them to travel, and their management presents significant challenges".

"This ability of patients to travel safely also means that we are becoming aware of a lot of surgery being conducted in outlying towns by doctors with limited skills, resulting in patients coming in with a range of very serious complications".

"These patients are described as presenting with 'abdominal catastrophes' and they are stretching the expertise of the local surgeons which was another reason that urged me to make this decision".

Mr Wetzig said the hospital had established a Family Medicine

Below: Neil and Gwen with Dr Luc and Dr Muller

Left: Gwen Wetzig with a student

Program to train junior doctors in basic surgery to treat trauma and burns and to conduct C Sections and appendectomies in a bid to avoid such serious complications.

He and Dr Luc are working with the College of Surgeons of East, Central and Southern Africa (COSECSA) to determine if the HEAL Africa Hospital could receive support and accreditation to becoming a teaching hospital and Mr Wetzig is also in discussions with COSECSA exploring the possibility of becoming an examiner for General Surgery.

In April 2015, Mr Wetzig also took the opportunity to attend the launch of the Lancet Commission on Global Surgery held in London on his way home to Australia to assess how the work of the hospital will fit into the growing recognition of the need for surgery in low and middle income countries (LMICs) and the global surgery initiative.

"The Commission's goal is to provide '*universal access to safe, affordable surgical and anaesthesia care when needed*' and we know that 33 million people each year face 'catastrophic health expenditure' due to payment for surgery and anaesthesia care", he said.

"They simply cannot afford basic surgical procedures.

"I also attended the Lancet launch to see what was proposed to financially support surgical care in LMICs by global or private funding agencies".

"I believe the HEAL Africa Hospital has a role to play in reducing this burden not only through treating patients but by training doctors so they can perform basic surgical procedures and offer anaesthesia services in rural areas outside the cities in Africa".

"The hospital in Goma receives no Government money, there is no co-ordinated health system in the country, most patients are extremely poor and while Dr Luc has been tireless in his efforts to convince Government leaders of the need for a more co-ordinated approach to surgical services and training he has not met with much success".

"The hospital in Goma receives no Government money, there is no co-ordinated health system in the country, most patients are extremely poor and while Dr Luc has been tireless in his efforts to convince Government leaders of the need for a more co-ordinated approach to surgical services and training he has not met with much success".

"We are discussing the option of approaching corporations such as mining companies to think about developing philanthropic programs to help the people of the region".

"The hospital is also trying to build its internal medicine capabilities and provides a paediatric HIV outreach service".

Mr Wetzig said he would like the RACS to offer 'in principle support' for surgical training in the Democratic Republic of Congo and Africa in general. The provision of short-term Scholarships for African surgeons to upskill in Australia or New Zealand may be one approach.

Because of his endocrine surgical specialty, he is now also trying to raise funds to support goitre surgery at the hospital.

"There are a large number of people in the region suffering with massive goitres caused by a diet that is iodine deficient and based around cassava which blocks the production of the thyroid hormone", he said.

"However, funding bodies do not see it as a disability, war injury or an emergency even though such patients are stigmatised and ostracised by their communities".

"The procedures only cost about $US350 each so those of us involved in AusHEAL are now trying to think up ways to raise funds to support the work".

Mr Wetzig wished to particularly thank those RACS surgeons who have given their time and skills to the HEAL Africa Hospital including Mr Paul Millican and Upper GI surgeon Mr Andrew Smith and acknowledged retired hospital administrator Mr David Kelly who has regularly travelled to Goma to teach hospital staff administrative skills and systems management.

After his recent stay in Goma Mr Wetzig said he was pleased to have made the difficult decision to work in Africa.

"I'm so glad Gwen and I made this decision because even in this first short stint I can see great scope to make a difference", he said.

"I'm still young enough to be of use which I think is very important and Gwen teaches English in the hospital which means that we get to spend more time together than we did in Australia and we get to share this valuable experience".

Not long after his return to Goma from his Surgeons International Scholarship visit to the Princess Alexandra Hospital in Brisbane, Dr Luc successfully saved the life of a Belgian prince who was shot and brought to the HEAL Africa Hospital with major open thoraco-abdominal trauma.

Now, he is the preferred local referral surgeon for Medecins Sans Frontieres, is consulted by doctors working at the international aid organisation Operation Smile and has even been consulted by the President's Office to offer his expertise.

He described his visit to Australia as a great privilege and said observing procedures had improved his skills in Upper GI surgery and in his ability to deal with liver tumours and perform bowel anastomosis.

Before arriving in Brisbane, Dr Luc faced a major problem with the leakage of some anastomosis that resulted in faecal fistulae after bowel occlusion repair yet since his return he has faced no such complications.

Yet although he is confronted every day with the problems associated with having limited equipment and technology, an inability to train junior doctors and treat all the people that need his care, he remains optimistic and committed.

In a feedback report to the College, Dr Luc wrote: "The most pressing needs facing us relate to abdominal cases such as bowel occlusion, biliary obstruction and cancer, paediatric surgical cases and trauma".

"Around Goma, surgery is performed by non-trained doctors and nurses which is resulting in abdominal catastrophes like faecal fistulae, vesico-vaginal and rectal fistulae... and we would like to gain accreditation in order to offer formal surgical training to these young doctors".

Above: Neil, Luc and colleagues operating together

"We are now working to decrease morbidity and mortality due to the complications of surgery and I am trying to augment the coverage in the number of surgeons from one surgeon per one million to one surgeon for 100,000 people".

"I would like to become a voice for improved surgical care to my community and help to find ways to source the equipment necessary for good surgery".

In particular, Dr Luc said the HEAL Africa Hospital lacked diagnostic equipment such as imaging facilities and pathology for histology, simple instruments like retractors, sutures, theatre lights, electro cautery and bedside monitoring systems.

He wrote that he had become both a better surgeon and medical leader through his Scholarship visit.

"I am more confident performing surgery and even my wife told me: 'Since you came home from Brisbane, your appetite is better, you are less distressed when you come home from hospital and the family is happier'.

"If possible, I wish I could have more such surgical rotations every two years (which) would continually improve my development".

Below: Neil and Luc operating together in Goma

WEARY DUNLOP BOONPONG FELLOWSHIP **EVALUATION**

Introduction

The Weary Dunlop Boonpong (WDBP) Fellowship Program is a collaboration between the Royal Australasian College of Surgeons (RACS) and the Royal College of Surgeons Thailand (RCST). Since 1988, the exchange program has been providing opportunities for Thai surgeons to undertake clinical attachments in Australian hospitals for a period of four to six months in their nominated field of interest.

The Fellowship provides opportunities for the recipients to obtain further exposure in general or specialist surgery, gain experience in clinical research and the applications of specialist technology, and further develop hospital management skills in a multi-disciplinary environment. The nature of the training is apprenticeship-style, and WDBP scholars are supernumerary to Australian trainees. Scholars observe and *may* assist (although this is left to the discretion of the supervisor) in elective operations where appropriate and are granted access to hospital libraries, participate in surgical meetings and audits, and attend appropriate lectures relevant to their interests.

Up to six Fellowships are awarded annually. Between 1988 and 2014, 82 Fellows successfully completed their attachments in Australia.

Between June 2014 and August 2015, RACS undertook a survey of WDBP Fellowship recipients to glean a broad understanding of the outcomes of scholars' attachments under the Program, so improvements can be made to increase its effectiveness. To be eligible to participate in this survey, WDBP Fellows had to have completed their Fellowship attachment at the time of the survey. Of the 76 Fellows who were eligible and contactable, 36 responded.

Methodology

The survey was designed with a mixed methodology approach combining short-answer, multiple-choice and likert scale questions. Both qualitative and quantitative data were sought to ensure relevant and detailed information could be extracted from the responses.

Approximately a third of the way through the survey (from question eight onward), four respondents consistently failed to respond to questions. The missing responses were excluded from analysis in order to avoid skewing of the data.

Privacy issues were considered when undertaking this survey. Respondents wishing to remain anonymous are not identified.

Results

FELLOWSHIP OBJECTIVES

The vast majority of respondents reported satisfaction with their attachments, and generally felt happy with their skills and knowledge outcomes. 87% of respondents reported to have achieved all of their aims under the program, with 88% having learned a new surgical technique/s during their Fellowship. When asked if their new skills were useful upon return to their unit in Thailand, 97% agreed that the surgical and technical skills they had acquired were useful, and reported that they were able to offer new and/or more complex surgical or other health services as a result. 78% agreed that the management, administration and leadership skills they acquired were useful, with 88% reporting that the patient management skills they had acquired were helpful and that, since completing the Fellowship, they had introduced or improved patient audit systems in their units. Clinical research skills were recorded as the least applicable skill at 39%, with only 47% of respondents participating in clinical or academic research projects post-attachment. Almost every respondent (with the exception of one who was unsure) reported that they would recommend the Program to their colleagues.

28% of respondents said they were unable to transfer some technical aspects of service delivery to their workplace, and identified financial restraints as the predominant barrier preventing them from implementing certain technical skills.

Disappointments pertained to lower than expected levels of hands-on operative experience (although 81% *were* satisfied), language barriers and a supervisor issue. It should be noted, however, that the Fellowship is not designed as a hands-on experience, due to the restrictions placed on Fellows' medical registration. WDBP Fellows come to Australia predominantly as observers, and any hands-on experience is granted only at the supervisor's discretion.

Half of respondents felt that their English proficiency negatively affected their training, however, two of these respondents did state that their comprehension improved over time after immersion in the English-speaking environment. Only 16% felt that their training was entirely unaffected.

Since completing their Fellowships, 81% of respondents reported having gone on to positions of leadership within their home institutions.

Dr Teera Simpattanapong
2006 Scholar, Paediatric/Cardiac.
Supervised by Prof David Winlaw (right)

"I am in debt to the Weary Dunlop Boonpong Program for all my life. I have learned a lot in complex congenital heart surgeries and sometimes I ask my supervisor, Dr Winlaw, about how to do surgeries to patients especially in very complex operations".

FUTURE GOALS
Respondents were asked to record their future goals and aspirations for improving health care in their community. Responses were split across seven categories. The predominant goals were, one, to improve patient management and administrative systems, and two, to train colleagues and improve the overall team (19% and 16% respectively). Other goals included the introduction of a new service (12.5%), improved academic and research skills (12.5%), improved personal surgical skills (9%), advocacy and awareness raising and maintenance of current practice and standards (3% respectively).One respondent reported personal career ambitions to obtain a high-level administrative position within the Ministry of Health.

66% of the respondents have remained in contact with their Australian supervisor or colleague since returning home.

RACS & RCST ADMINISTRATION
The survey data revealed that scholars, to a large extent, felt satisfied with the administration of the Fellowship by both Colleges including the application process, the coordination of the medical registration and visa applications and general logistics. 100% of respondents were satisfied that the selection process by the RCST was transparent. Most (72%) were satisfied with the quality of email communication they received from the RACS, and generally (72%) felt that the instructions provided by the RACS staff were easy to follow.

Despite the general satisfaction pertaining to broader administrative matters, a significant portion (26%) of respondents reported dissatisfaction with the documentation requirements (specifically for the Australian Medical Council, Medical Board of Australia and Visa application processes). This difficulty was predominantly reported by respondents awarded the Fellowship from 2003 onwards. Some found the process to be overly complicated, and felt they were not provided with adequate support to meet the requirements.

Discussion

This evaluation reveals a strong positive sentiment towards the Fellowship Program as a whole. Few disappointments were recorded, and respondents largely reported to be satisfied with their experiences, with the majority having achieved all of their intended aims. The application process to the RCST, and subsequent placement coordination by the RACS were viewed in a very positive light, although the documentation requirements for AMC, AHPRA and Immigration applications were viewed less favourably. Significant improvements to the Medical Registration and Visa application processes have since occurred (in part due to appeals initiated by RACS), and it is hoped that future Program evaluations reveal these requirements to be more manageable and less time-consuming for Scholars.

The results indicate that RACS could better manage scholars' expectations of obtaining hands-on operative experience. Attachments are designed predominantly to be an observation experience, mandated by the Australian Medical Board as a condition of their medical registration. The College will ensure that future applicants are better informed of the nature of the Fellowship experience to avoid disappointments. Where appropriate, the College will encourage scholars to undertake an English language proficiency exam to qualify them for a less restrictive category of medical registration that will enable them to have greater interaction with patients and more hands-on experience.

Dr Chittinad Havanond
1988 Scholar, Oncology.
Supervised by Prof John Forbes

"The Weary Dunlop Boonpong Fellowship program improved my experience in leadership, self-learning, systematic thinking and interpersonal skills. Australia was my first experience abroad. Australian people are very nice people so I am very lucky to be a Weary Dunlop Boonpong Fellow. I have to thank the Royal Australasian College of Surgeons and Royal Thailand College of Surgeons, moreover Sir Edward Dunlop and Mr Boonpong who made a strong relationship between both countries".

A number of scholars reported difficulty transferring certain skills and practices acquired in Australia to their home environment, predominately due to resourcing restrictions in Thailand. Although there is no provision under the Fellowship to support returning scholars with items of equipment, the WDBP Thailand Travelling Fellowship, established in 2009, supports the Australian supervisors to undertake short follow-up visits to their scholar's unit in Thailand to assist with the implementation of the new skills. Six scholars have received a visit by their former supervisor under the Program. Reports from these visits demonstrate the strong relationships formed and the ongoing engagement between the scholars and supervisors regarding the scholars' progress in Thailand. It is hoped that the return visits under the Program will assist the supervisor to support the scholar in overcoming the challenges faced at home.

Conclusion

Overall, the evaluation results strongly indicate that the Program is achieving its objectives, and that scholars are benefiting greatly from their experiences in Australia. RACS acknowledges that there is scope for improvement, however, the results clearly demonstrate the numerous successes achieved as a direct result of this Fellowship and the ongoing relevancy of the program to the development of the health care system in Thailand.

The College thanks all of those who completed the survey. Their valuable time, honesty and patience is greatly appreciated.

The College seeks expressions of interest from departments of surgery or heads of units of all surgical specialty in Australia, who feel they can offer a milieu in which young Thai surgeons can obtain valuable experience. Please contact RACS Global Health on +61 3 9249 1211 or email international.scholarships@surgeons.org

SHARING THE BENEFITS

RECIPIENTS OF THE COLLEGE'S WEARY DUNLOP BOONPONG (WDBP) EXCHANGE FELLOWSHIP ARE SHOWING LEADERSHIP BACK HOME. ***WITH KAREN MURPHY***

Thai Cardiac Surgeons who received a College-funded Scholarship to extend and enhance their training in Australia are now showing transformational leadership skills, particularly in their efforts to develop local paediatric cardiac surgery, according to Professor David Winlaw.

Professor Winlaw, a Paediatric Cardiac Surgeon at the Children's Hospital at Westmead, has supervised and mentored a number of Thai Scholarship recipients and late last year visited Thailand to gain a first-hand understanding of the impact of the Australian training provided.

While there he visited four Cardiac Surgeons who received support to travel to Australia through the Weary Dunlop Boon Pong (WDBP) Exchange Fellowship, which commemorates the bond forged between Australia and Thailand during the brutal construction of the Thai-Burma railway during WWII.

Operating suite team in Phitsanulok

Since its inception, more than 70 young Fellows of the Royal College of Surgeons in Thailand (RCST) have been sponsored to visit Australia to advance their training across all specialties.

Professor Winlaw's visit occurred in December 2013 and was coordinated in Thailand by Dr Jessada Methrujpanont, the most recent WDBP Fellow to train at the Children's Hospital in Westmead.

He also spent time with other WDBP Fellows Dr Jarun Sayasathid, Dr Suksan Kanoksin and Dr Teera Simpatanapong.

While there, he visited regional, metropolitan and university hospitals, assisted in a number of complex cases such as tetralogy of Fallot, provided informal hospital-based lectures and gave a presentation at the Horizon in Cardiology 2013 conference, co-organised by the Society of Thoracic Surgeons in Thailand.

Professor Winlaw said that while metropolitan and university hospitals were now conducting complex paediatric cardiac surgery, regional hospitals often lacked the specialist ancillary skills necessary to make such surgery viable, such as anaesthetists skilled in paediatric care, perfusionists and Intensive Care staff.

He said that this was in part driven by low volumes of complex cases, a Thai health system which had not encouraged subspecialisation and a lack of specialist neonatal ICU staff.

However, he said all the WDBP Fellows were actively working together to progress and advocate for the development of Paediatric Cardiac Surgery across the country.

"It is clear that the WDBP Fellowship program has given these surgeons an opportunity to work in high volume centres and gather the necessary experience to take Paediatric Cardiac Surgery forward in Thailand," Professor Winlaw said.

"It has given them a common framework to discuss and mould the specialty in a way that continues to be of benefit to the country years after their sponsored visit.

"While I was struck by how complex it is to create a sub-specialty like Paediatric Cardiac Surgery in a country like Thailand which does not have such a well-coordinated health system, I was also particularly struck by the close collaboration that exists between the WDBP Fellows.

"This common bond of having trained in Australia means that those surgeons who are conducting Paediatric Cardiac Surgery in cities and regional hospitals now collaborate on cases and in their training of junior surgeons because they have seen what is possible in Australia and have the same aspirations for Thailand.

"Their leadership skills are now transforming hospital systems and patient care which I believe proves the value of this Exchange Program.

"One of the problems facing Thai surgeons and specialists is the Thai language which is very complex and rarely spoken elsewhere. English is not commonly learnt and this is an impediment to participation in international networks and learning in the global environment.

"At one Hospital, a WDBP Fellow has mandated that the operating team converse only in English for one day a week, part of an outward looking approach designed to be a springboard for further learning. ."

During his visit, also sponsored through the WDBP Exchange program, Professor Winlaw spent two days in Phitsanulok, in Thailand's north, where he assisted Dr Jessada at the government-run Buddhachinaraj Hospital. While there, he also visited Dr Jarun at the University Campus Hospital.

He then spent time in Bangkok at the Ramathibodi Hospital, a major tertiary centre affiliated with Mahidol University, which is one of three centres in the city that performs complex and neonatal Paediatric Cardiac Surgery.

In both these centres, Professor Winlaw assisted and supported the principal operating surgeons.

Later in his trip, he travelled to Ubon Ratchathani in the East where he attended the Cardiology conference and gave a presentation on the Ross Pulmonary Autograft procedure.

He said that while Dr Jessada was doing small volumes of low and moderate complexity Paediatric Cardiac Surgery in a hospital environment of limited resources and support, Dr Jarun was undertaking larger volumes of similar work with more resources in a hospital with a vision of developing Paediatric Cardiac Surgery.

He said the two surgeons, although working in different circumstances, collaborated closely.

"The Thai surgeons I have been associated with are all good technical surgeons and have sufficient knowledge of clinical sciences to be excellent Paediatric Cardiac Surgeons," Professor Winlaw said.

Below: WDBP Fellows' dinner in Phitsanulok

"However, their aspirations are limited because of structural issues within the Thai health system which make it difficult to develop Paediatric Cardiothoracic Surgery.

"These include local referral practices and fear of bad outcomes in less experienced centres, a financial need by surgeons to conduct adult cardiac surgery and insufficient case volume to support the development of related specialists in perfusion and anaesthesia.

"The WDBP Fellows are aware of these constraints and are working to overcome them."

Professor Winlaw said some of these constraints may be eased if the WDBP Exchange Fellowship was broadened to involve other Australasian Colleges.

Upon his return to Australia, he wrote a report to the RACS suggesting that additional funding sources be found to allow a small team of perfusion, anaesthetic or intensive care specialists to visit Australia at the same time as Thai surgeons.

"In my field of practice, I can see that the WDBP program is facilitating the development of medical services and therefore benefiting the Thai community," he said.

"However, I believe we could get additional benefit if we focussed the program on one regional centre and one Bangkok centre and allowed the local surgeons to nominate the support services they wish to develop through education and training in Australia.

"This would allow a paediatric cardiac surgeon to visit an Australian hospital with their anaesthetic, ICU or perfusion colleagues so as to broaden the base of expertise in this developing specialty."

Professor Winlaw has also provided training and support through various visits to Myanmar and Cambodia and said the facilities in Thailand and the skills of Thai surgeons could allow that country to become a regional leader in the development of Paediatric Cardiac Surgery across South East Asia.

"Other groups from Japan and Singapore are also active in their support of Paediatric Cardiac Surgery in Thailand but much of this is limited to the operating room rather than addressing the system in which the surgeons must work," he said.

"If we can tailor our support to a specific tertiary centre and a regional hospital we could help build a system similar to ours where the very sick neonates are cared for in Bangkok and older children requiring less complex procedures can be treated in a regional centre.

"This is the aspiration of the WDBP Fellows and it would be rewarding to help them attain it."

The WDBP Exchange Fellowship is named after Sir Edward "Weary" Dunlop, one of Australia's greatest wartime heroes and life-long humanitarian, and Mr Boonpong Sirivejbhan, a local Thai who helped the prisoners of war forced to build the railway by the Japanese.

DEVELOPMENT OF **EYE HEALTH CARE** IN SUMBA

THE COMMITMENT AND DETERMINATION OF AN AUSTRALIAN OPHTHALMOLOGY AND OPTOMETRY TEAM TO REDUCE AVOIDABLE BLINDNESS AND IMPROVE EYE HEALTH CARE FOR THE PEOPLE OF SUMBA IS RESULTING IN STEADY PROGRESS IN THE DEVELOPMENT OF EYE CARE SERVICES ON THE INDONESIAN ISLAND.

Sumba is an Indonesian island in the province of Nusa Tenggara Timur in Eastern Indonesia. In Sumba, surgical services are limited to general surgery and caesarean procedures. There is no provision for ophthalmology or other specialist services, nor is there any local access to optometry. As in many developing, low-resource areas, uncorrected refractive error and cataracts are a major cause of unilateral and bilateral visual impairment.

The Sumba Eye Program, led by Ophthalmologist Dr Mark Ellis FRACS AM and optometrists Mr Peter Lewis OAM and Mr Peter Stewart OAM, was established in 2008 to address the gap in eye care services in Sumba and the surrounding regions. The volunteer ophthalmologists, optometrists and nurses conduct biannual screening clinics to test vision and provide corrective spectacles, and referrals to the ophthalmologists for surgery including small incision cataract surgery.

Over time, the Program has increased its focus on teaching and training Indonesian health personnel in an effort to help establish a sustainable local workforce and service for eye care in Sumba.

"RACS, PERDAMI (Indonesian Ophthalmologists Association) and Ophthalmology Department in Faculty of Medicine - Hasanuddin University have been working together for 3 years now. We heard about RACS' great work in Sumba from Daliah Moss, who had been working as a NGO representative in Indonesia. We were touched to hear that our Australian friends have been helping our people in Sumba for years. Because of that, we wanted to be involved. We are honoured to have a collaboration with RACS in order to encourage eye care services in Sumba. Dr Mark Ellis' effort of teaching and sharing knowledge by visiting us in Makassar is also highly appreciated." - Habibah Muhiddin. Head of PERDAMI-South Sulawesi Branch

Collaboration with Hasanuddin University

With the endorsement of the Indonesian Ophthalmology Association and the Indonesian College of Ophthalmology, ophthalmologists and ophthalmology trainees from Hasanuddin University in South Sulawesi were invited to join a Sumba Eye Program clinic for training and collaboration in 2012. This was the start of what has developed into a strong collaboration effort between the Sumba Eye Program and the Department of Ophthalmology at Hasanuddin University, whose ophthalmologists and trainees now regularly participate in the Program's clinics. The Indonesian team members are experienced in small incision cataract surgery, and on top of their regular workload, they undertake monthly outreach clinics in Sulawesi and West Papua, so they are well versed in the obstacles of outreach work, and are great contributors to the program's activities.

The involvement of the Indonesian ophthalmologists has been

a significant step for the Program, which continues to seek opportunities to engage regional doctors and further develop its training component. The lack of infrastructure and government resources in Sumba, and throughout rural Indonesia, means that the establishment of a local ophthalmology service is not likely in the short-term. However, the successful collaboration between the Sumba Eye Program and Hasanuddin University is helping to up-skill regional ophthalmologists and training them to deliver this model of outreach clinic. The intention is to eventually hand over the Program to the university, or a regional institution, to own and manage nationally, with the international team members visiting intermittently for teaching and consultation on specific cases as required.

Eye care and refraction training

With generous sponsorship from Optometry Giving Sight and Kabo Lawyers, the Program has provided eye care including refraction training to 12 local nurses and community health workers since 2013. Two Sumbanese were sponsored to undertake further training at the John Fawcett Foundation in Bali, after which they were employed to lead the set-up of a permanent eye care service in West Sumba. They are now providing a full time eye care service including refraction and spectacle provision to the community.

The role of the eye care nurses is critical because, although spectacles are available for purchase in most of the main town centres in Nusa Tenggara Timur, there are no national trained refractionists or optometrists available in the province to perform vision assessments and give accurate spectacle prescriptions. With the majority of the population unable to afford treatment in Bali or overseas, the intermittent Sumba Eye Program visits have been one of the only options for treatment. The eye care nurses are now providing a full time service, free of charge to the West Sumba community.

"It all started with a smile. Back in 2011 at a conference in Sydney, Daliah Moss smiled at me and I smiled back. That smile started the collaboration between RACS, PERDAMI and Hasanuddin University. Four years later, I got myself involved with RACS by joining their work in Sumba. It was my first time working with them, first time to ever step into Sumba and how I enjoyed it so much! Although I was only involved for the first few days in Sumba, it felt like I'd known the RACS team for years. It's amazing what a simple smile can do for others." - Adelina Poli. Young staff in Ophthalmology Department, Faculty of Medicine - Hasanuddin University.

Above: Eye Care Nurses managing screening clinic in Hobawawi, Sumba

Ongoing skills development of national eye care personnel is now the main focus of the Sumba Eye Program. Capacity development has been measured by the number of eye care workers trained and the retention rate, the number of people screened by the eye care workers between the Program's visits and the appropriateness of the patients referred by the Eye Care Nurses for optometry or ophthalmology consultation.

Following a visit in August 2015, Dr Ellis reported:

"What we observed this year was the quality of referrals coming from the villages for surgery. A higher proportion of the patients were properly selected by the Eye Care Nurses for treatment. This demonstrated the increasing skills of the eye care nurses to diagnose and refer patients properly".

The eye care workers are now instrumental in the recruitment of patients as well as providing clinical follow-up after the team's departure. But there is always the risk that the recruits will move away for other employment opportunities, and one of the biggest challenges is to train enough eye care workers to ensure that the service is sustainable.

The Sumba Eye Program is supported by Optometry Giving Sight, Glenferrie and Kew Rotary Clubs (Victoria), Kabo Lawyers, Watiga & Co., the Sumba Foundation, Mondottica and private donors, with logistics support from the Royal Australasian College of Surgeons.

Below: Mark Ellis with Rainy Octora (Sumba Foundation)

CARDIOTHORACIC SURGERY IN **PAPUA NEW GUINEA** - AN UPDATE

FORMER ROWAN NICKS SCHOLAR, DR NOAH TAPAUA, REPORTS ON HIS EFFORTS TO ESTABLISH A CARDIOTHORACIC UNIT IN PAPUA NEW GUINEA BY 2020. ***BY DR NOAH TAPAUA***

Introduction

Papua New Guinea (PNG) had a population of well over 7 million in the 2007 census, and like other developing countries, cardiothoracic pathologies pose a significant problem with high incidence of both congenital and acquired heart diseases and general thoracic pathologies including trauma related problems similar to Western countries. Patients with cardiac or thoracic related surgical problems either receive treatment by general surgeons who can only do what they can, wait for the annual Australian Operation Open Heart (OOH) cardiac team visit, or receive palliative medical treatment. The few who can afford it, pay their own way to seek treatment overseas.

A catchment area of 200,000 people is one of the requirements for a cardiothoracic unit and the two main capital cities of PNG (Port Moresby and Lae) are well qualified with more than 500,000 residents. The caseload at Port Moresby General Hospital (PMGH) is increasing because of the growing population and the influx of people to the capital.

Between 1993 and 2014, 893 patients were successfully treated by the visiting OOH team, with a mortality rate of 1.9%. The team concentrates on paediatric cases where the majority of patients have congenital heart disease (80%). Less than 20% are adults. This therefore does not reflect the true rate of heart disease in PNG, with a high prevalence of rheumatic fever and other acquired heart diseases associated with the changing lifestyle of the local population.

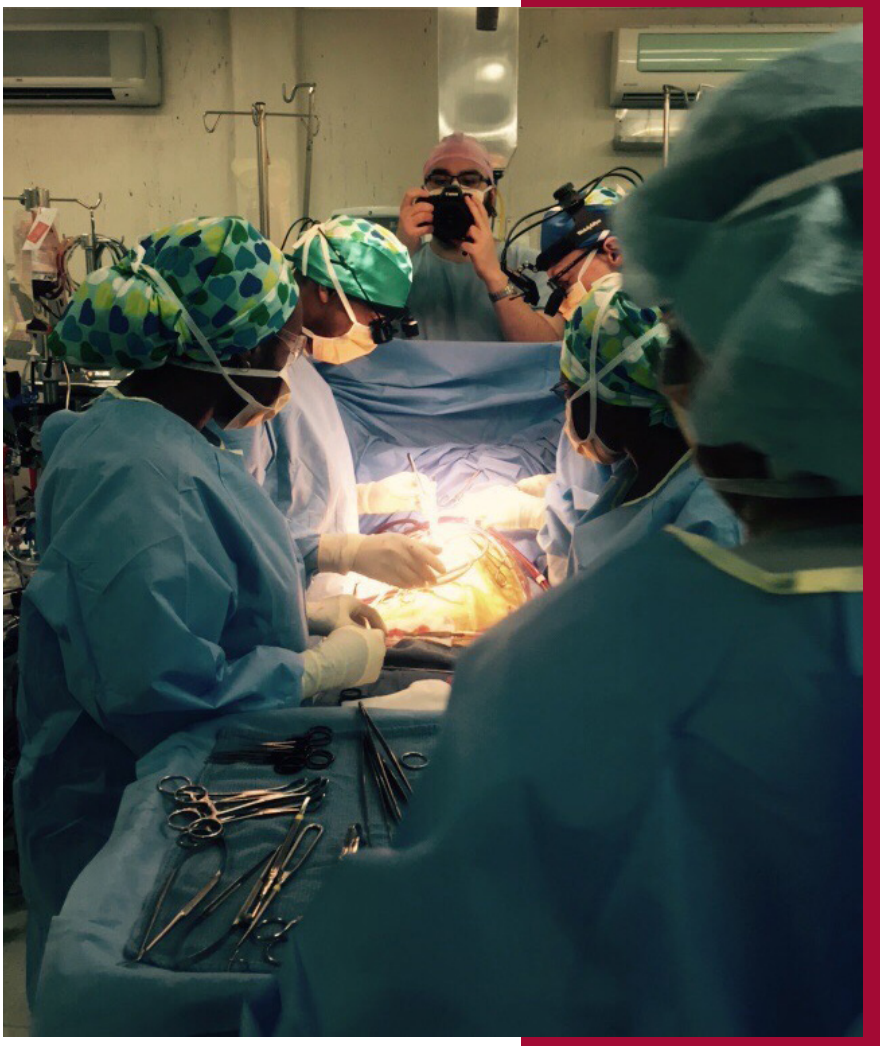
An established cardiothoracic specialist service in the country is well overdue. Considerable planning, equipment and resources are required to set it up, but once established, the economic advantage is irrefutable. The National Government will need to take ownership and include it in every calendar budget as history has shown that ad hoc funding will not sustain the service.

Once established, the unit will provide cardiac surgical procedures including complex valve surgery, congenital and coronary bypass operations including 'beating heart' bypass surgery and comprehensive thoracic surgery services for patients with any surgically treatable lung and chest diseases as well as chest trauma.

Objectives

1. To establish a Cardiothoracic Unit for the country by 2020.
2. To reduce the mortality rate of heart disease by 10% from 2 to 1.8 per 100,000 population by 2020.
3. Venture into research for thoracic and heart related pathologies in PNG.

Below: PMGH Ward Photo: Sr Kila, Dr Elizabeth Alok, Dr Arvin Karu, Dr Mathias Tovilu, Dr Cornelian Kilalang & Noah Tapaua



Left: PNG team doing an ASD repair on a 9 year old

Aims

1. To establish a cardiothoracic service that is accessible and affordable in the country.
2. Develop and upgrade a section at the Port Moresby General Hospital to a cardiothoracic and coronary care unit, with the cardiothoracic wing to be established by 2016.
3. Establish a curriculum adopted by the University of Papua New Guinea for under-graduates and postgraduates training in cardiothoracic surgery.
4. Establish a long-term sister hospital relationship between the visiting Australian cardiac team, Chennai Hospital in India and the SingHealth cardiac team in Singapore.

The indicators will be medical cardiac, surgical cardiac and thoracic mortality.

Progress

Progress has started with the upgrade of ward 7 at PMGH to a four bed coronary care and cardiothoracic ward. In 2012, ward 7 was renovated to a high dependent three bed capacity unit by a private sponsor company, and fitted out with equipment and monitors for cardiac and thoracic patients. The unit is being used for post-operative cardiac patients and is capable of taking in very sick patients and also aiding in offloading our intensive care unit patients as a step-down high dependency unit.

"The partnership with RACS played a vital pivotal role in our progress through the sponsorship of a Cardiothoracic Anaesthetist and two Cardiothoracic Surgeons, including myself, to undertake overseas clinical attachments under the Rowan Nicks Pacific Islands Scholarship"

Training

The partnership with RACS played a vital role in our progress through the sponsorship of a Cardiothoracic Anaesthetist and two Cardiothoracic Surgeons, including myself, to undertake overseas clinical attachments under the Rowan Nicks Pacific Islands Scholarship.

Dr Arvin Karu who is our Cardiothoracic Anaesthetist, was sponsored in 2008 and 2012 as a Fellow at the Cherian Heart Foundation in India and a term at the Westmead Children's Hospital respectively.

The late Dr Lister Lunn completed 18 months of cardiothoracic training at the Cherian Heart Foundation in 2008 to 2009, while I did my one year training as a Fellow in cardiothoracic surgery at the Geelong Hospital, Victoria, Australia in 2007 and another year at the National Heart Centre, Singapore, in 2013, all under the Rowan Nicks Scholarship and the PNG OOH Foundation.

In 2014 two of our Anaesthetist Scientific Officers spent twelve months with the Perfusion unit at the National Heart Centre Singapore. In early 2015 six of our nurses also went for training attachments at the Singapore National Heart Centre. We all have returned to PNG and we are now together as a team at our main referral hospital, the Port Moresby General Hospital.

In 2013 the SingHealth cardiac team from Singapore started their visits to PNG, and together with the Australian team, they have been working with us to provide on-the-job mentoring and training, with the aim of fully establishing cardiothoracic services in

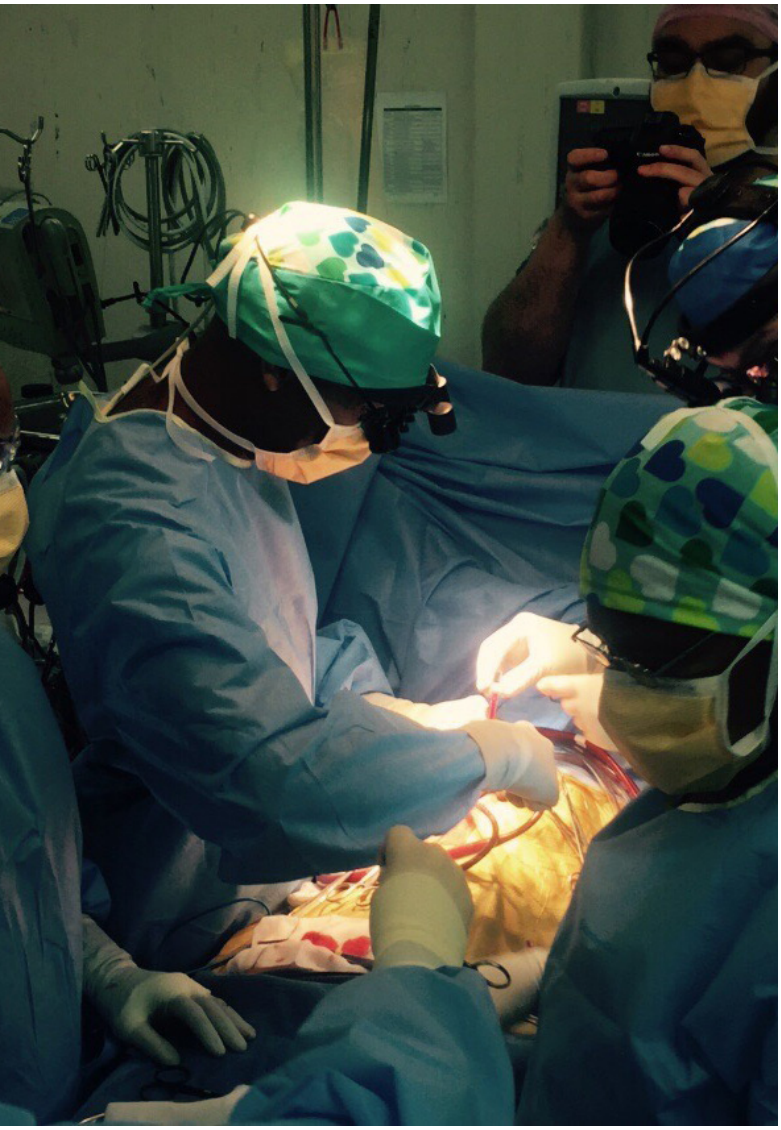
the country.

The continuing education from the OOH and SingHealth teams every year has raised the standard of care for cardiac patients and the general level of care for other patients and the new unit will maintain this.

Challenges

The biggest challenge to our progress has always been financial support, limited trained personal and equipment. The low volume of cases (average 46 cases per year) has made it difficult to report positive results, and resulted in the deskilling of trained staff. Apart from service provision, the external visits have often disrupted the usual flow of patients and the distribution of limited, vital equipment during these visits has been uneven. The total reliance on external support has been our greatest hindrance as while visiting cardiothoracic teams come to help us treat our patients, their departure often leaves us with a void that we are unable to fill. Hands-on experience has always been a challenge when the background is non-cardiac surgery, and the expert cardiac visits are too brief and infrequent to maintain specialist skills.

Below: PNG team doing an ASD repair on a 9 year old



Limited success in moving away from the model of cardiac missions (service delivery) to a sustainable, indigenous cardiac service, has resulted in our program remaining in an infancy state for 22 years. It seems easier to get funding for cardiac missions than to fund surgery performed by the national team.

The unexpected passing of our senior colleague, late Dr Lister Lunn on 9 September 2015 will impact on our progress as it takes years of training to reach the senior level that he was. It is a challenge we will have to take on if we are serious in establishing our own cardiothoracic service in PNG.

Current status

With the national team now at PMGH, we are doing the following procedures throughout the year:

- Patent Ductus Arteriosus (PDA) operations (closed heart operation)
- Insertion of pacemakers
- Pericardiocenthesis
- Pericardial window
- Pericardiectomies
- Lung lobectomies and pneumonectomies for lung pathologies
- Wedge resection of lung lobe lesions
- Decortication
- Repair of diaphragmatic hernias
- Repair of congenital esophageal hernias
- Esophageal cancer resection and gastric pull-up
- Esophageal cancer stenting
- Traumatic artery-venous (A-V) fistulae repair
- False aneurysm repair
- Insertion of central lines for hemodialysis

We took over the closed heart program in 2006. In March 2015, we performed our first three mitral valve replacement surgeries and one complex patent ductus arteriosus surgery under the supervision of the visiting SingHealth team. In July 2015 this year we operated on ten children with ventricular septal defects and atrial septal defects under the supervision of the visiting Australian cardiac team. In addition to assisting with the operations, our nurses were given the task of looking after the post-operative patients while the

visiting cardiac nurses from both teams shadowed them. Prior to the visiting teams' assistance, we were already performing closed heart surgeries, and we have continued to do so after their departure, operating on a total of 28 patients with PDAs. The complications encountered were manageable and there was no mortality.

The Way Forward

To fully nationalise cardiothoracic surgical services in PNG, we have re-strategized our approach to achieve our goals as outlined below:

1. Increase the number of cardiothoracic visits to four per annum.
2. Reduce the size of each visiting teams so our local staff play a leading role
3. Halve the budget for annual visiting teams, and use the remaining half of the money to build our capacity.
4. A four year time-line has been developed to phase out the visiting teams so that by 2019, an independent Cardiothoracic unit will be set up at the PMGH.
5. For open heart surgeries, the aim is to concentrate on ASDs, VSDs and Mitral Valve pathologies.
6. Target volume of 10-12 surgeries to perform with the visiting teams and one-two surgeries per week in the intervening periods to give a total of 100 to 150 surgeries per year.
7. Drugs and consumables to be purchased by the PMGH and the PNG National Department of Health
8. Establish a cathlab by 2018.
9. The visiting teams to comprise of: one Cardiac surgeon up to 2019; one Cardiac Anesthetist up to 2019; one OT scrub Nurse; three ICU Nurses; one Perfusionist; 1 Bio-medical Engineer; 1 Intensivist; one Interventional Cardiologist post Cath Lab installation up to 2019; 2 Cath Lab Nurses post Cath Lab installation up to 2019.
10. The local team to comprise of: 1 Cardiothoracic Surgeon; 2 Cardiothoracic Surgical trainees; 1 Cardiothoracic Anesthetist; 2 Cardiothoracic Anesthetist trainees; 2 OT Scrub Nurses; 8 ICU Nurses; 12 Ward Nurses; 2 Perfusionists; 2 Physiotherapists; 1 Social worker; 1 Nutritionist; 1 Intervention Cardiologist (Post Cath Lab set up); 2 Interventional Cardiologist trainees; 3 Cath Lab Nurses (Post Cath Lab set up).
11. To use the existing CT three bed unit, ward 7 and one operating theatre.

By setting the above targets we aim to have an independent Cardiothoracic surgery unit at the Port Moresby General Hospital by 2019 that will serve our people and the Pacific as a whole.

"We aim that by 2019, we will have an independent Cardiothoracic surgery unit at the Port Moresby General Hospital that will serve our people and the Pacific as a whole"

Acknowledgements

On behalf of the local cardiothoracic team, the adult and paediatric cardiology teams, and the people of Papua New Guinea, I would like to extend our gratitude of thanks to the following who have assisted us in training, the time and effort contributed by individuals to help us come this far towards achieving our goal:

1. The Royal Australasian College of Surgeons & Rowan Nicks Scholarship Program
2. The Geelong Cardiothoracic Unit, Geelong Hospital, Barwon Health, Melbourne, Australia
3. The Cherian Heart Foundation, India
4. Westmead Children Hospital
5. National Heart Centre Singapore
6. Dr Lenoard Kaupa, General Surgeon who initiated the cardiac visit program in 1992
7. The PNG Operation Open Heart
8. The Operation Heart International
9. The Port Moresby General Hospital
10. The PNG National Department of Health
11. The PNG Government

Tribute to Late Dr Lister Lunn, (Born 26 February 1961 and died on September 9, 2015)

We missed you during our last Operation Open Heart program in July. You paid us a brief visit in the middle of the program telling us to continue what we were doing, not knowing that you came to say goodbye and that we would miss you forever. Gone in the wind but your story will live on in the hearts and minds of the younger generation of PNG surgeons. Your hands were truly made for surgery, firm but gentle. My mentor in cardiothoracic surgery and friend, we will continue the journey for cardiothoracic surgery as you told us … may your soul rest in peace till that blessed morning when Jesus comes.

OUR **VOLUNTEERS**

A HANDFUL OF RACS GLOBAL HEALTH VOLUNTEERS SHARE THEIR INSIGHTS AND EXPERIENCES

Sumba Eye Program

ALISON PLAIN -NURSE

WHAT DO YOU FIND THE MOST REWARDING PART OF THE EXPERIENCE TO BE?

Over the many years of volunteering in Maliana and Sumba the most rewarding experience is to see the patients' and their families' reaction when they realise that their sight has been restored!

WHAT HAS BEEN THE MOST CHALLENGING PART OF THE EXPERIENCE?

The most challenging aspect would be when sight can't be improved due to underlying disease. Other challenges include observing the extreme poverty resulting in malnutrition and how the people struggle to get simple things like drinkable water.

WHAT WOULD BE YOUR ADVICE TO OTHERS THINKING ABOUT VOLUNTEERING?

I would highly recommend volunteering as it is a humbling experience and personally the highlight of my year when I feel that I can make a difference however small.

PERRY BURSTIN - ENT SURGEON & TEAM LEADER

Pacific Islands

WHAT DO YOU FIND THE MOST REWARDING PART OF THE EXPERIENCE TO BE?

One can take the best motives of the medical profession and distil this further in the application of humanitarian aid work. It has been terrific to see national capabilities and proficiency increase over the years. In addition, the great dignity exhibited by the patients we see is always heartening. They are grateful, not entitled and indeed very patient.

WHAT HAS BEEN THE MOST CHALLENGING PART OF THE EXPERIENCE?

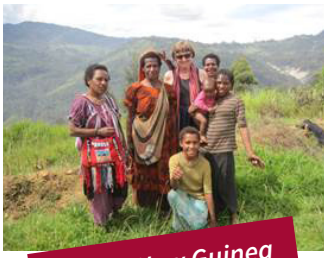
It can initially be quite confronting to work in a developing environment, but it does make one more resourceful (like the time we had to sterilize a black'n'decker drill to complete a mastoidectomy).

The hardest part of the trip is in prioritising surgical cases. Making value judgements on human beings when limited resources prevail is very difficult, particularly when visits are limited in time and scope.

WHAT WOULD BE YOUR ADVICE TO OTHERS THINKING ABOUT VOLUNTEERING?

I am always reminded of the aphorism – 'no one person can change the world, but you can change the world for one person' – that encapsulates the approach my team takes and maintains the enthusiasm year after year.

FRANCES BOOTH - OPHTHALMOLOGIST AND FOUNDER, PNG EYE-CARE PROJECT



Papua New Guinea

WHAT DO YOU FIND THE MOST REWARDING PART OF THE EXPERIENCE TO BE?

As an ophthalmologist, the rewards of outreach in the short term include the very great improvement in vision for those who undergo cataract surgery. In the longer term, there is the significant impetus for the host personnel to develop the process and facilities for sight restoration for their own people in their own hospitals. This has been such a rewarding result, and still is.

WHAT HAVE YOU FOUND TO BE THE MOST CHALLENGING?

The most challenging part of taking a surgical team to PNG is the preparation. This can take months.

ANY STORIES FROM THE FIELD?

There was a tiny old lady we initially thought to be too frail and depressed to undergo surgery. We saw her a week later - marching victoriously down the road armed with a walking stick followed by a bevy of grandchildren in single file!

WHAT WOULD BE YOUR ADVICE TO OTHERS THINKING ABOUT VOLUNTEERING?

If you have the inclination, then do it. It may be a cliché to say that you learn and gain more by doing so, but it is true, and you meet a lot of great people in the process. Finally, a word of advice, don't expect to stay in the best hotel.

I am always reminded of the aphorism – 'no one person can change the world, but you can change the world for one person'

Don't be afraid to plunge in to a new experience and embrace it wholeheartedly; the journey can be surprising, challenging at times, and ultimately delightful!

GEORGINA PHILLIPS - EMERGENCY PHYSICIAN

WHAT DO YOU FIND THE MOST REWARDING PART OF THE EXPERIENCE TO BE?

The opportunity to meet and work alongside colleagues from our region is rich reward for the capacity development activities I've been involved in. I've learnt from and been inspired by these clinicians both personally and professionally. It's a great privilege.

WHAT HAVE YOU FOUND TO BE THE MOST CHALLENGING?

Local clinicians have often had the experience of outsiders making a brief visit for teaching and training, and then never coming back to reinforce the message or build momentum. Appreciating the full sense of responsibility that one has to be culturally acceptable and show commitment over the longer term is a substantial challenge.

WHAT WOULD BE YOUR ADVICE TO OTHERS THINKING ABOUT VOLUNTEERING?

I think one of the key messages is to be prepared to commit for the longer term. It's easy to make time for a short, one-off visit, but the real value lies in following up and becoming a familiar face and friend. Don't be afraid to plunge in to a new experience and embrace it wholeheartedly; the journey can be surprising, challenging at times, and ultimately delightful!

NORBERT HOEGERL - BIOMEDICAL EQUIPMENT ENGINEER

WHAT DO YOU FIND THE MOST REWARDING PART OF THE EXPERIENCE TO BE?

To watch the guys I train working on and with the equipment I maintain using the skills I taught.

WHAT HAVE YOU FOUND TO BE THE MOST CHALLENGING?

Power fluctuations and high humidity.

ANY STORIES FROM THE FIELD?

On one of my first trips to Oecusse we could not get the steriliser going and had to use an ancient pressure cooker steriliser we found. However, I had to fix it first and to make sure it would not explode. I was assisted by a Cuban Nurse. She showed me the store room where the sterilizer was kept. As we entered I saw this absolutely "massive spider" hiding under a cupboard. I jumped out of the room. Having slight communication problems the good nurse asked me what happened. I did try to explain to her but it was in vain…in the end I just told her… YOU GO FIRST AND I WILL WAIT HERE…it all turned out well in the end.

WHAT WOULD BE YOUR ADVICE TO OTHERS THINKING ABOUT VOLUNTEERING?

Just go and help others. Maybe one day they will help you!

WE ARE INDEBTED TO ALL OF OUR VOLUNTEERS FROM AUSTRALIA, NEW ZEALAND AND THE COUNTRIES WHERE WE WORK, FOR PROVIDING THOUSANDS OF HOURS OF SPECIALIST MEDICAL CARE TO THOSE IN NEED

PARTNERS AND SUPPORTERS

Air New Zealand, Air Vanuatu, Alcon, Australian and New Zealand College of Anaesthetists, Carl Zeiss, Critical Assist, Designs for Vision, East Timor Eye Program, Eye Surgery Foundation, Fred Hollows Foundation, Foresight, Guide Dogs Queensland, Hobart Eye Surgeons, Brien Holden Vision Institute, Individual donors, Interplast, Jetstar, Johnson & Johnson Medical ANZ, Life Healthcare, Lions Sightfirst, Micromed International, Novartis, Optimed, Optometry Giving Sight, Orthopaedic Outreach, Overseas Specialist Surgical Association of Australia (OSSAA), Pfizer, ProVision Optometry, Red Cross, Rotary, Rotary Club of Balwyn, Rotary Club of Glenferrie, St John Ambulance, St Johns of God Health Care, The Kearney Family, The Kimberley Foundation, The Sumba Foundation, The Australian Society of Otolaryngology Head & Neck Surgery, The Royal Australian and New Zealand College of Ophthalmologists, The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, United Airlines, Vision 2020, The Wilkinson Foundation

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RACS Global Health
Royal Australasian College of Surgeons
250-290 Spring Street
East Melbourne, Victoria AUSTRALIA
W: www.surgeons.org P: +61 3 9276 7436
E: global.health@surgeons.org