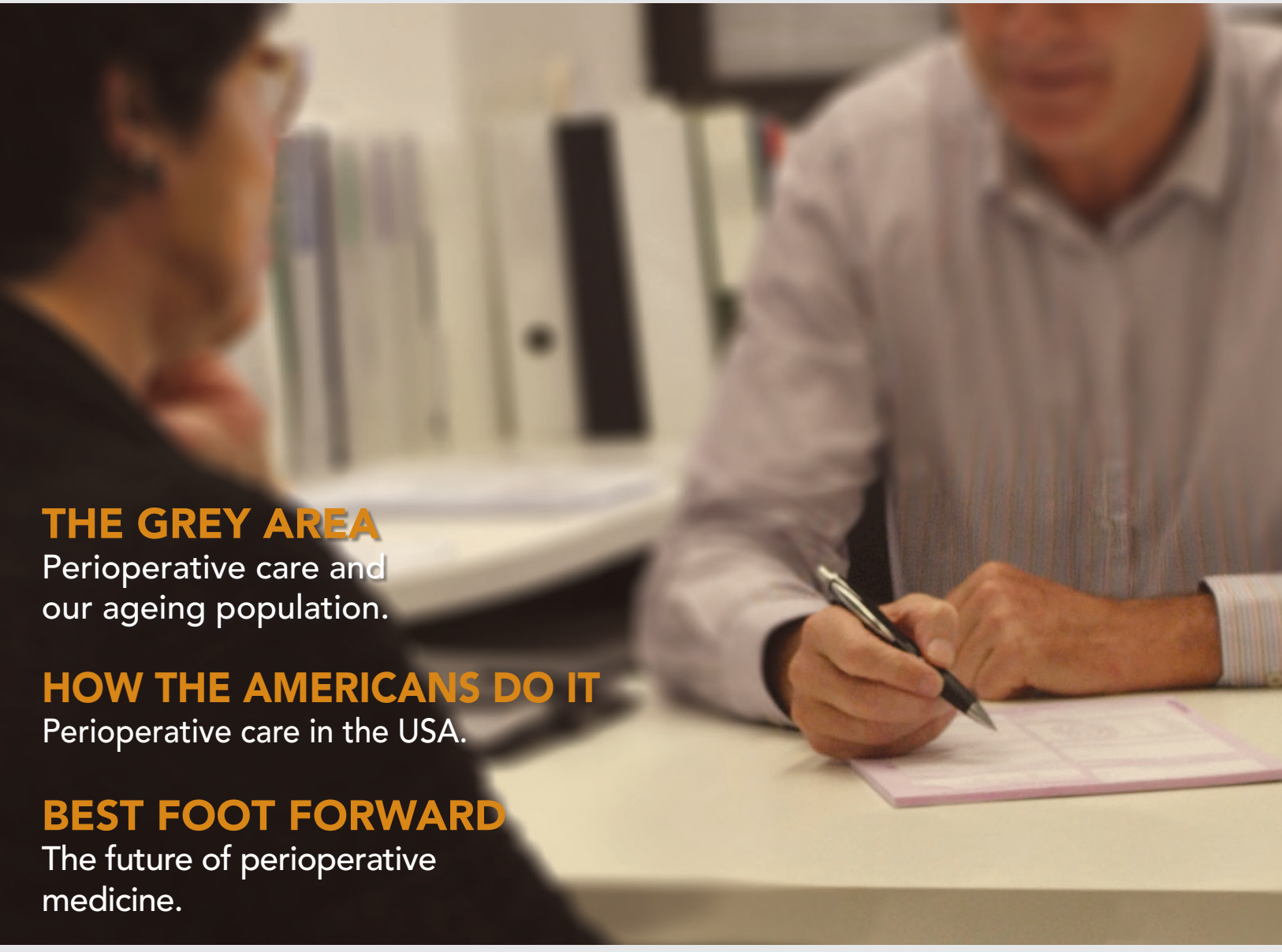
AUSTRALIAN
Anaesthetist
THE MAGAZINE OF THE AUSTRALIAN SOCIETY OF ANAESTHETISTS • MARCH 2017



THE GREY AREA
Perioperative care and our ageing population.

HOW THE AMERICANS DO IT
Perioperative care in the USA.

BEST FOOT FORWARD
The future of perioperative medicine.

ANZCA's approach to perioperative care.

Extended postoperative care – a high-value way of doing business?

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Australian Society of Anaesthetists

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7-10 OCTOBER 2017

Australian Society of Anaesthetists
National Scientific Congress

7-10 OCTOBER 2017

Perth, Australia

REGISTRATION

OPENING 31 MARCH

INVITED SPEAKERS

Professor Michael Avidan

Professor, Anesthesiology, Washington University. Director, Institute of Quality Improvement, Research and Informatics (INQUIRI) and Division Chief, Cardiothoracic Anesthesiology.

A/ Professor Marjorie Stiegler

A/ Professor of Anesthesiology at the University of North Carolina, Director of the Consortium for Anesthesiology Patient Safety and Experiential Learning.

Dr Philipp Lirk

Attending Anesthesiologist at the Academic Medical Center, University of Amsterdam. Head of Regional Anesthesia Service, he is also in charge of two international academic exchange programs.

Professor David Story

Foundation Chair of Anaesthesia at the University of Melbourne, and Head of the Anaesthesia, Perioperative and Pain Medicine Unit. Senior Investigator, ANZCA Clinical Trials Network

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AUSTRALIAN
Anaesthetist
THE MAGAZINE OF THE AUSTRALIAN SOCIETY OF ANAESTHETISTS

The Australian Society of Anaesthetists (ASA) exists to promote and protect the status, independence and best interests of Australian anaesthetists.

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FEATURES

40 NSC 2017 – Perth/WA, Bridging the Elements

INSIDE YOUR SOCIETY

WOULD YOU LIKE TO CONTRIBUTE TO THE NEXT ISSUE?

The June issue features of *Australian Anaesthetist* will focus on Regional Anaesthesia If you would like to contribute with a feature or a lifestyle piece, the following deadlines apply:

- Intention to contribute must be emailed by 7 April 2017.
- Final article is due no later than 21 April 2017.

All articles must be submitted to editor@asa.org.au. Image and manuscript specifications can be provided upon request.

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ASA EDITORIAL FROM THE PRESIDENT

A/PROF. DAVID M. SCOTT
ASA PRESIDENT

Welcome to the first edition of *Australian Anaesthetist* (AA) for 2017. This edition is focused on the importance of perioperative medicine – one of the most important issues for our profession at this time. Through years of careful investigation by anaesthetists all over the world, the practice of anaesthesia has become so safe that some uninformed observers believe that it requires no special skill to perform "simple" sedation and anaesthesia. Many specialists have commented to me that anaesthesia for endoscopy can be amongst the most difficult cases as the patient comorbidities make it a challenging task.

The real value of the anaesthetist is of course in the preoperative assessment and optomisation of our patients. As legislators and economists look at ways of cutting spending on health, it is clear that some consider anaesthesia for 'simple' procedures to be a 'low-hanging fruit'.

One of the important roles of the ASA is to promote our profession and to inform these people that anaesthesia is so much more than just the act of providing anaesthesia in the operating or procedure room. As Lee Fleisher states in his article "there is a danger of anesthesiologists being viewed as a commodity rather than as a critical resource". We as a profession are obliged to prove that we provide excellent value to our patients and to fund-holders, both inside and outside the operating room, for nobody else is going to do this for us.

The World Federation of Societies of Anaesthesiologists (WFSA) has been working with the World Health Organisation (WHO) to develop access to safe surgery around the world. Currently over five billion of people do not have access to safe life-saving surgery (http://ow.ly/HTuD308ypEO). The WFSA is actively promoting the role of physician-led anaesthesia as the only way that anaesthesia should be provided to address this. They make the following statements:

> *Anaesthesiology is the medical science and practice of anaesthesia. It includes anaesthesia for surgical, obstetric and trauma care, and areas of practice such as perioperative medicine, pain medicine, resuscitation, and intensive care medicine.*
>
> *An anaesthesiologist is a qualified physician who has completed a nationally recognized specialist training programme in anaesthesiology.*

This is a valuable concept and one that those considering task substitution do not understand. In their article on extending care Ludbrook and Walsh make some excellent points about thinking differently on how we care for our patients. This more holistic approach is well suited to anaesthetists and fits very well with the WFSA definition of who we are and what we do. It is time for us to not just think outside the box, but to practice outside the box (aka operating room) before we are consigned to becoming a commodity which is kept in the box!

Drs Yelland and Soon draw our attention to both the need to work collaboratively with our physician and surgeon colleagues to optimise our care of what is becoming our most common patient. The elderly patient brings to us so many challenges and needs which impact on how we care for them. This group also demonstrates a need which we have not really acted on in the past. We know that there are things our patients can do to reduce complications and improve outcomes, like cessation of smoking. We encourage our obese patients to lose weight, yet rarely do we see this happen. We are now seeing that close supervision and intensive pre-conditioning of elderly; malnourished and debilitated patients can directly lead to better outcomes and earlier discharge from hospital. Clearly these improved outcomes are the result of a coordinated team effort, in which anaesthetists play a pivotal role, and Dr Kerridge expands on this.

Prof David A. Scott gives us the education and training piece to complete the future shaping of the speciality of anaesthesia in Australia. As he points out, further training on this area of perioperative medicine (POM) will strengthen our position to be involved in the more holistic care of our patients, while at the same time recognising that some anaesthetists will desire differing levels of involvement. This advanced

training will form the bridge between groups with differing skill sets to ensure more comprehensive care and greater value for our patients and for fund-holders. The speciality doesn't wish to take back intensive care, it doesn't wish to run HDUs, what we need is the opportunity to extend the excellent care we provide in the operating room to recovery and beyond. This process can save lives, improve outcomes and reduce costs from complications. This is, in many respects, what Enhanced Recovery After Surgery is and it is what we are all capable of.

There is also a feature about an innovation by one of our colleagues (Dr Reiner) to provide better preoperative nutrition for our patients. This is a simple and home-grown, practical idea to address the issue of patients fasting excessively and arriving for surgery in a catabolic state.

We also read of Dr Haydon Perndt and the activities of the Real World Anaesthesia Course. I have had the distinct pleasure of attending the military version of this course years ago. I encourage you to read his article and learn of the activities of the dedicated people who travel to the' Real World' and teach doctors how to provide safe and effective anaesthesia to their people. The ASA's Overseas Development and Education Committee (ODEC) has been very active and supportive in this area and the speciality should be truly proud of their activities.

Finally, the ASA is acutely aware that the MBS review is currently under way. I would strongly encourage you to make comment to any of the committee members you may know. The anaesthesia Clinical Committee is dedicating significant time considering the CMBS RVG and may be making recommendations about future funding for the work that you do. It would be unfortunate if the committee were to make recommendations without considering the individual views of colleagues. The current situation is that the ASA can only have comment on your behalf once their interim recommendations are made, but any individual is entitled to contact the committee members and give them your views. The committee members can be found at http://ow.ly/5Frf308ypU3.

Please enjoy reading this edition *Australian Anaesthetist*, I am sure you be enlightened and hopefully challenged to think differently about your speciality!

CONTACT

To contact the President, please forward all enquires or correspondence to Sue Donovan at: sdonovan@asa.org.au or call the ASA office on: 02 8556 9700

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ASA UPDATE FROM THE CEO

MARK CARMICHAEL, ASA CEO

The Medicare Benefits Schedule (MBS) Review, which occupied a significant amount of time and thought in the latter half of 2016, continues to do so this year. The Anaesthesia Clinical Committee (ACC), assembled to undertake this review from the anaesthesia perspective, is, we believe, working to a timeline which will ideally see a draft report available for comment sometime in late March or April of this year. The ASA is looking forward to the draft report, and welcomes the opportunity for comment.

Members may recall that in December of 2016 a survey, The ASA/ANZCA Questionaire – MBS Review, was circulated to the whole of the profession, as a way of obtaining an indication of the professions position on aspects of the review. I would like to thank all those members who took the time to respond, as the data compiled from this survey will assist in the Societies' responses to any initial report.

While the ACC must undertake its work in an independent fashion, the ASA has taken the opportunity, through the EAC Chair, Dr Mark Sinclair, to meet with senior representatives from the Department of Health in order to be kept abreast of the review and to offer comment and suggestions from the Society's perspective where appropriate. While no one can predict the content of the ACC's draft report, it is important that the ASA does remain involved where possible.

Last year also saw the ASA adopt a more contemporary approach to its governance structure with the establishment of a Board of Directors, responsible for the business of the ASA and a Council whose focus is more directed toward the professional issues facing the specialty. One aspect of this change was the opportunity for the Council to elect from among its number, two directors, to join the five directors elected at the Annual General Meeting. I am very pleased to report that the Council, at its December meeting, elected Dr Mark Sinclair (SA) and Dr David Borshoff (WA) to fill these two positions. I am sure that all members will join me in congratulating them on their election to the Board.

The Journal of *Anaesthesia and Intensive Care*, was rated in the 2016 Members Survey as one of the most highly valued services offered through the Society. This is in no small way due to the wonderful work done over the past almost 8 years by Dr Neville Gibbs as its Chief Editor who will be standing down from this position in 2017. The Society is greatly indebted to Dr Gibbs, and I would like to take this opportunity to thank him for his outstanding contribution over this time. The very difficult task of finding a successor has begun. It is hoped that the new Chief Editor will be appointed by mid-year.

While referring to member services, one of the 'quiet achievers' throughout 2016 was the Harry Daly Museum's Online Exhibition. Drawing on material held in the Harry Daly Museum and focusing on working in Sydney's operating theatres, the exhibition attracted over 5,000 views from all around the world during 2016. If you would like to peruse our wonderful collection and stay abreast of any new additions, visit http://harrydalymuseumoptheatres.com/.

Looking ahead, 2017 holds much promise for the Society. Already in the period July to December 2016 over 140 new members were welcomed into the Society. Such a strong level of membership uptake augers well for the ongoing activities of the Society this year. February saw an extremely successful Regional Anaesthesia SIG meeting (ASURA) staged and the 2017 NSC in Perth is only six months away!

A significant undertaking in the first half of 2017 is a review of the Society's Communication Strategy. Communication means many things to many people and it covers a myriad of different aspects, including branding, publications and social media activities. As the Society looks to position itself effectively with government, the membership and the public it is appropriate that a formal review of how we can best do that is undertaken. This process has begun and ideally the outcomes from it will be incorporated in how the Society looks to communicate in the future.

CONTACT

To contact Mark Carmichael, please forward all enquires or correspondence to Sue Donovan at: sdonovan@asa.org.au or call the ASA office on: 02 8556 9700

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LETTERS TO AUSTRALIAN ANAESTHETIST

CALLING ALL ANAESTHETISTS OR ANAESTHESIOLOGISTS?

I believe the time has come for us to declare to our patients and colleagues the medical excellence that underpins anaesthesia in Australia.

The WFSA was first established in 1955 with 26 societies represented. Since then it has grown to include over 134 societies, representing anaesthesiologists/anaesthetists from 150 countries.

Given the gradual globalisation of anaesthesia, and increasing collaboration of anaesthesiologists/anaesthetists worldwide, I would like to suggest the time is nigh for Australian anaesthetists to identify themselves as anaesthesiologists. I'm advocating this change for the following reasons:

- Approximately 70% of WFSA societies are 'Societies of Anaesthesiology or Anaesthesiologists', including those with major influence. North America, most of Europe, South America and Scandinavia all identify themselves as anaesthesiologists. The British and some Commonwealth countries, remain in the minority with the anaesthetist terminology.
- In the US, where anaesthesia was first successfully demonstrated, and with the biggest population of medically qualified anaesthesia providers, the term anesthesiologist is used.
- For many, anaesthetist does not readily convey the science-based 'study of', which the 'ology' component of the title does in other medical specialties*. In the US, anaesthetist is reserved for nurse trained providers – a source of frequent confusion in the international arena.
- Standardising our title would save explanations to both research collaborators and industry representatives, given that a significant proportion of this stems from North America and Europe.
- It would bring all of us onto an equal footing with our specialist colleagues: cardiologist, neurologist, dermatologist, pathologist, urologist, gynaecologist, microbiologist are all examples of medically trained specialists. Anaesthesiologist simply emphasises our medical training.
- Despite its higher syllable count, anaesthesiologist appears to be easier for the average patient to pronounce, reducing the embarrassment and time taken helping patients get their tongue around anaesthetist.

South Africa made the change over two decades ago and it appears discussions have begun in New Zealand, so now might be an appropriate time for the Societies and College to canvas member opinion. Should there be enough support, the combined 2020 meeting in New Zealand might be an opportune moment to implement any change.

Declaration

Dr David Borshoff is the Director of Anaesthesia and Pain Medicine at St John of God Murdoch Hospital in Western Australia. He is the WA ASA Chair and a member of the Board of the ASA.

The views stated in this article is his only, and does not represent those of the organisations with which he is associated.

Dr David Borshoff MBBS FANZCA
Cottesloe, WA

*-ology, a suffix derived from the Greek logos, meaning the 'study of', 'specialty in' or 'art of' a given scientific or medical field.

Editor's note:

During Professor Michael Cousins' ANZCA presidency (2004–2006) a detailed assessment of changing the word anaesthetist in ANZCA to anaesthesiologist was made. The result of this 18 month process was to keep the ANZCA name unchanged. Members' comments are invited.

CIG CHICAGO, OCT 2016

I have just returned from representing the ASA as a Trainee Member (TM), previously GASACT, at the American Society of Anesthesiologists annual meeting, Anesthesiology, in Chicago. With approximately 15,000 attendees and 12 learning tracks with 600 sessions, the ASA (US) is the largest anaesthesia meeting in the world and it was an amazing experience to be a part of.

I am currently undertaking my fellowship in regional anaesthesia in London, Ontario which has been an incredible learning opportunity so far. I've spent much of my time in the regional anaesthesia track building on my current experience, but was also interested in the clear focus throughout the meeting on the changing face of medicine and anaesthesia. This was highlighted by the keynote speaker,

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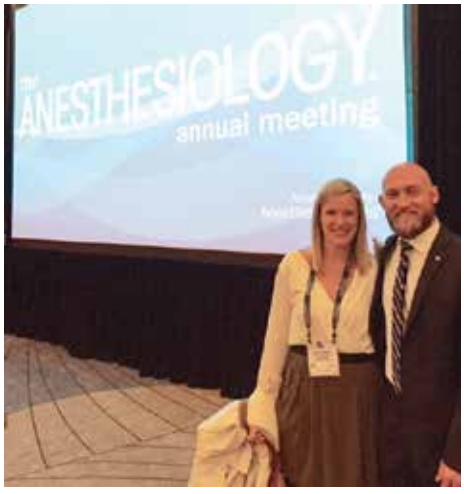
Dr Michael Porter, from Harvard Business School, who advocates a value-based healthcare model and highlighted concepts including bundled payment and a systematic integrated care cycle; this certainly stimulated interesting conversations on the first day of the conference!

I have a strong interest in developing world medicine and was captivated by the Ellison Peirce memorial lecture by Dr Alexander Hannenberg discussing patient safety beyond our borders with issues including the 'biomedical graveyard' of donated medical equipment sitting idle without skilled maintenance; and also noted that 44% of the world's population lives with less than 20/100,000 surgical staff, siting Ethiopia as an example, a country of 99 million people with only 23 anaesthetists!

I attended the resident house of delegates and educational session which was an interesting contrast compared to our annual ASA trainee face-to-face meeting due to the much larger number of American resident delegates from across the country. Discussions ranged from nurse anaesthetists to training accreditation and research opportunities. I briefly met with current exiting President, Dr Daniel Cole (below), and other delegates during the day which was a great opportunity to discuss our experiences and common issues.



Dr Brigid Brown and outgoing ASA (US) President Dr Daniel Cole at the Anesthesiology annual meeting 2016, Chicago.

In addition to the conference, Chicago had plenty to offer! I watched the Chicago Black Hawks hockey with some great Adelaide colleagues, and explored the architecture and cuisine of this fantastic city.

Thank you so much to the ASA for this wonderful opportunity, I am so grateful to have been selected. See you in Boston for Anesthesiology 2017!

Dr Brigid Brown BMBS
North Adelaide, SA

RE: WHITECOAT & PRIVATE HEALTH INSURANCE, DEC 2016

I write as a consumer of medical services who recently happened upon a copy of your December issue. I would like to take issue with Dr James Miller's article 'Whitecoat and private health insurance'.

Dr Miller claims Whitecoat makes three false assumptions:

- First, that "patients currently have no way of independently assessing specialists they are referred to". If it's false Dr Miller, please point me to what you would consider to be an appropriate source of comparative information. I have had over 35 procedures in the past two decades, most requiring anaesthesia. For all but one I chose my primary specialist – or at least my GP did – but not my anaesthetist. Absent anything else, patient comments are, to me, a reasonable proxy. Even if I could have chosen my anaesthetist, I know of no way of making that choice rationally.
- Second, that "PHIs have patients' best interests at heart". I can only agree that this is false. All for-profit entities have profits as their foremost concern.
- Third, that "price is not a measure of quality". Dr Miller's article implies that price is indeed a measure of quality, but he gives no evidence. As a consumer, I take heart in Australia's high training and experience requirements for entry to each medical specialty and consider those to be my best protection. Given those protections I have always found price differentials puzzling, and especially so for anaesthesia.

Dr Miller's article goes on to decry the entrance of PHIs into healthcare provision. My contention as a consumer is that if PHIs can provide well-priced health services then that is to the consumer's advantage, so long as the consumer can compare the various PHI offerings. Health professionals and consumers all need to agitate for greater transparency in those PHI offerings.

Mr Austin Adams
Brisbane, QLD

IN RESPONSE TO ADAMS

In response to Mr Adams' comments, the intention of my article was to highlight that the Whitecoat website will not provide an unbiased rating tool to compare medical practitioners. As this website is funded by private health insurers and based upon patient feedback focussing on their out-of-pocket expenses, my intention was to argue that this will result in biased ratings which preference bulk-billing specialists over those who charge appropriately for the services they provide. This will not result in a true representation of quality of service provided, but simply the cheapest.

As Mr Adams writes, he currently relies upon his GP's recommendations when choosing a private specialist, and would welcome patient feedback to help make these decisions. My argument is that Whitecoat will not provide a true representation of experience of the service provided. While I would support a more independent rating system, patients need to remember that both subjective and objective reporting of specialists is difficult due to the huge array of variables. In terms of selecting an anaesthetist I agree this is a near impossible prospect for patients,

however ranking of them based upon price will not change this.

In the commercial sphere, price is often used as a marker of quality. Whether or not this is true depends on perception of value of the product or service experienced by the consumer. In the original 7:30 report, Norman Swan argued a $10,000 prostatectomy was no better than a $400 one. I disagree that such statements can be made. Removing the prostate is but one component of such a surgical experience, and the overall service provided by the different priced surgeons and the attached value patients place on these services is paramount to determining value for money. Anaesthetists can differentiate their services in many ways that provide added value to the patient.

Of concern is Mr Adam's belief that PHIs are well placed to provide primary healthcare services, especially when he states that he is aware that they are profit driven enterprises. As such, patient outcomes will always be second to the economics of provision, and as is evident in the American system, leads to poor outcomes, or the abandonment of patients when the budgeted costs of care is exceeded. This has already been seen in Australia when Medibank Private announced a plan to abandon patients who suffer known complications of surgery for e.g. DVT.

Again I believe private health insurance is a tool to help mitigate the cost of private health care, and unless you are purchasing cover that guarantees unrestricted cover, it should not be expected to cover the full cost of care. Practitioners must remain independent of health insurance companies when they set the cost of their services, and should match prices to the level of service they are providing to ensure a valued medical and commercial interaction with patients.

Dr James Miller
Shenton Park, WA

HISTORY OF THE ASA LOGO

Sections of the article which appeared in Anaesthesia and Intensive Care in 1987 have been cited in the December 2016 Feature. However, there are a couple of areas where the original intent of the article have been altered or are incorrect.

It was decided that no individual volatile liquid, and there were a few, were to be mentioned. Instead, it was recognised that "the history of anaesthesia is intricately involved with colatile liquids". At the time the symbol was designed, ether was no longer used in major hospitals and probably only in a few peripheral country hospitals.

The symbol of the hand had been used by other organisations to indicate caring, skill and friendship. The idea of uniting the two came from the use of the compact Goldman vapouriser used to introduce Halothane vapour entering the circuit. To try to combat this, anaesthetists attempted to warm the bowl by putting a hand around the glass bowl. It was not an "ether bowl" as stated in your article.

While this seems to be nit picking, since the symbol has been accepted as the registered logo for the society, I would like to believe the history of its design should be correct. In some ways, I am surprised that the symbol has lasted this long as we received a lot of negative interpretations at the time.

John Hains
Brisbane, QLD

THE ASA LOGO

My gratitude to the author of the Feature article on the history of the ASA logo. I would like to suggest that a reference to *50 Years* by Gwen Wilson may have been of value – it would have allowed the membership to a little more information on its origin as well putting the date into perspective in the Society's evolving growth.

I was present in Perth 1978 when the logo was unveiled at the AGM to much derisory laughter "looks like a cup of coffee from Repin's" (a well-known Sydney chain of coffee shops). I was told that when Geoffrey K was in an airport lounge on his way to an international meeting, in response to the question of identification of the Australian delegation, he produced a penny from his pocket, doing a pencil-stencil of the kangaroo on the obverse, as a basis for the badge, as he called it. The information from the Royal Australian Mint nullifies my story though, as the 1937 et seq KGVI penny kangaroo was genderless – "Incidentally, it was originally an entire kangaroo, but the Committee hastened to emasculate it, lest it embarrass our women-members".

Finally, I have discovered serendipitously that for many years I have been guilty of breach of copyright! Since my appointment as Librarian/Archivist in Feb1981, I have had printed for my use, notelets, a book-plate and various visiting cards. Initially, I used the official ASA's Bridge Printers using the then approved Gold 124; currently my printer uses, a CMYK yellow, not Pantone 118 but more like Pantone 138/152 (I plead incipient cataracts). If my sin, more venial than mortal, is to be punished, may the penance be light due to my aging/losing my marbles, my ASA Life and 50 year memberships hopefully ensuring leniency.

Richard J Bailey
Emeritus Hon Librarian

HAVE YOUR SAY

We would love to hear your feedback on our magazine and its content. All letters are welcomed and will be considered for publication. The Medical Editor reserves the right to change the style, shorten any letter and delete any material that is, in his or her opinion, discourteous or potentially defamatory. Any major revisions required will be referred back to the author for approval.

Letters should be no more than 300 words and must contain your full name and address.

Please email us at editor@asa.org.au to submit your letter.

FEATURE

PERIOPERATIVE CARE IN THE UNITED STATES

In the United States, the past two decades has observed a marked increase in the expansion of medical services provided by anesthesiologists outside of the operating room, writes Professors Lee A Fleisher (Robert D Dripps Professor and Chair of Anesthesiology and Critical Care & Perelman School of Medicine at the University of Pennsylvania) and Aman Mahajan (Ronald L Katz MD Professor and Chair of Anesthesiology & Perioperative Medicine & UCLA Health and David Geffen School of Medicine at UCLA, Los Angeles).

As a reflection of this changing paradigm, multiple academic departments across the country have incorporated 'Perioperative Medicine' as part of their official identity. The recent focus on transforming the US healthcare payment system from volume to value has further accelerated the pace of change with which departments and the American Society of Anesthesiologists have embraced strategies to ensure that we demonstrate value. Bundled payments, in which the hospital is given one payment for 30 or 60 days of care and includes hospital, physician and post-acute care, is increasingly being used by both the Centers of Medicare and Medicaid (CMS) governmental programs and private insurers. Within this context, several strategies have been embraced: the Perioperative Surgical Home (PSH), Enhanced Recovery after Surgery (ERAS) protocols and increased engagement in preoperative and postoperative care, which are separated from the more formally defined strategies.

The underlying concept is that focusing solely on the provision of intraoperative anaesthesia in and of itself can lead to anesthesiologists being viewed as a commodity rather than as a critical resource. While the public, other physicians and policy makers recognise the value of anesthesiologists as providers of intraoperative care for high-risk patients or complex surgery, there is a great deal of debate regarding value in low-risk outpatient procedures, such as endoscopy. Therefore, there is a strong clinical and financial interest in determining how best to enhance our value both in and outside of the operating room.

The PSH is a patient centric, team-based model of care created by leaders within the American Society of Anesthesiologists to help them meet the demands of the shift to value (www.asahq.org/PSH). In this model, perioperative care is coordinated by a physician led team, frequently comprised of an anesthesiologists, director of perioperative surgery and other members of PSH leadership. The goal of the PSH is to seek improved operational efficiencies, decreased resource utilisation, a reduction in length-of-stay and readmission, and a decrease in complications and mortality – resulting in a better patient experience of care[1]. The PSH model has been successfully implemented in several institutions and in selected surgical service lines with a particular emphasis on orthopaedic and urologic surgery[2,3,4]. The model has been typically effective where there is surgical buy-in; however, the model's initial implementation was met with some concern due to a perception that there was greater emphasis on the program being anesthesiologist-led as compared to the current multi-disciplinary physician-leadership approach.

While some institutions continue to develop the PSH model as initially outlined by the American Society of Anesthesiologists, many anesthesiology departments and groups (including the ASA) have moved to a more collaborative model of perioperative care in which there is not a clear anesthesiologist leader but a mapping of the entire perioperative process and defining the roles and responsibilities of each of the practitioners. In particular, there is increasing interest in co-management of postoperative care between anesthesiologists focusing on pain and fluid management, while the hospitalists and surgeons focus on chronic medical management and transitions to home.

Preoperative evaluation clinics have been in existence for decades, but many hospitals have shrunk or abandoned them because of the potential excessive costs with perceived little benefit. Many centres and healthcare companies have approached the high cost of preoperative evaluation clinics as an opportunity to develop web-based portals or apps for mobile and tablet devices as a means of capturing the preoperative data. With the proliferation of electronic medical records (EMR), many of these integrate into the EMR and help guide testing and therapy. For example, the algorithms embedded in these portals can help triage therapy, including further discussion of the appropriateness of surgery or referral for either anaesthesia or other consultations. In an attempt to provide greater value, many preoperative clinics are transforming themselves to provide additional perioperative medical services including prehabilitation care, anaemia management and glucose/blood pressure screening that can potentially improve surgical outcomes[5].

focusing solely on the provision of intraoperative anaesthesia in and of itself can lead to anesthesiologists being viewed as a commodity rather than as a critical resource

A major area of increasing interest in the United States is the implementation of the ERAS program[6,7]. Similar to the PSH, ERAS is focused on improving surgical outcomes and enhancing the patient experience before, during and after surgery. ERAS programs create evidence-based protocols that encourage the implementation of a standardised approach, evidence-based perioperative care. Integral to ERAS protocols are preoperative counseling for patients about the procedure and hospitalisation, optimising preoperative and postoperative nutrition, goal-directed fluid management, limiting the use of narcotic pain therapies, and promoting early mobilisation after surgery. Anesthesiologists are increasingly collaborating with our surgical colleagues and hospitals in the ERAS programs to shorten length-of-stay through adoption of, at least portions of, these protocols, including multi-modal analgesia, fluid management and lung protective strategies[8,9].

Anesthesiologists are increasingly collaborating with our surgical colleagues and hospitals... to shorten length-of-stay

However, there has yet to be widespread adoption of noninvasive cardiac output monitoring, but there is increase penetrance. There is also increasing interest in prehabilitation, with involvement by anesthesiologists in the preoperative clinic. Numerous centres are developing novel patient engagement strategies to shorten length-of-stay, including the use of activity monitoring to help ensure patients are in their optimal medical condition.

Finally, the American Society of Anesthesiologists has endorsed the Brain Health Initiative (BHI)[10]. The BHI is an effort to ensure that patients who are elderly and/or have mild to severe preoperative cognitive impairment recover from surgery with minimal cognitive dysfunction and a reduced incidence of postoperative delirium. Well in its infancy stage, the BHI is a multi-stakeholder and involves the American College of Surgeons, other specialty societies, federal partners, the American Hospital Association and public advocacy groups such as American Association of Retired Persons (AARP). It will be three-pronged and involve a provider education initiative, a patient education initiative through public advocacy groups, and a hospital educational group. Materials are currently being developed by the American Society of Anesthesiologists and there are discussions with our

FEATURE

Australian colleagues to collaborate on this important anaesthesia-led initiative.

An important consideration for successful implementation of these new innovative models of perioperative care is the requirement of significant initial investments in materials, clinician and staff time, and capital equipment. It is suggested that the upfront investments can be offset by reduction in cost of healthcare through improvements in patient outcomes. Early evidence supports this notion[11].

Perioperative medicine is clearly an important initiative in the United States. The key will be how best to implement it given the wide range of expertise available in independent departments as well as ensuring continued collaboration with our surgical colleagues.

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FEATURE

EXTENDED POSTOPERATIVE ANAESTHESIA CARE:

A HIGH-VALUE WAY OF DOING BUSINESS?

A substantial, unmet need in non-procedural medical care of the surgical patient is evident from published and emerging data in the literature; a situation exacerbated by an ageing population with increasing comorbidities, writes Drs Guy Ludbrook and Richard Walsh.

In response, a number of strategies for change are being developed, such as improved coordination of care and workflows in the perioperative surgical home, and enhanced specialist education in perioperative medicine[1,2].

One opportunity to potentially provide an early impact on patient outcomes, and to add genuine value into the system, is through extended care in the recovery room. This is a concept which encompasses the care we currently provide, with the skillsets we currently hold, and largely through the infrastructure already in place.

The potential impact of early enhanced postoperative care was recently highlighted in a paper by Swart et al[3]. The data presented suggested that formal preoperative identification of medium-risk patients; and the application of early High Dependency Unit (HDU)-type care to a group of these patients undergoing relatively simple gastrointestinal surgery was associated with large reductions in morbidity and mortality and improved direct hospital costs.

Whilst building and staffing new HDUs is challenging, especially in resource-constrained times, the type of care provided actually differs little from that delivered in our existing recovery room or Postoperative Anaesthesia Care Unit (PACU). These, of course, originally grew from a recognition that sending patients straight back to the ward after surgery and anaesthesia was undesirable and associated with early complications. This concept grew into the ICU, which has evolved from a recovery room initially used to allow extended ventilator support, to a separate facility and speciality providing sophisticated care of severe multi-system illnesses.

This evolution has, however, left in its wake a group of patients in a PACU receiving postoperative input from anaesthetists which probably should be continued. These are not patients best suited for handover to complex and

resource-intensive ICUs, nor to care in the general ward where monitoring and experienced medical and nursing is often not available.

A walk through many recovery rooms will identify this patient group. These are patients with usually single system issues, such as persistent hypotension, persistent pain, high levels of sedation, significant oxygen requirements, concerningly low estimated Glomerular Filtration Rate and uncertain renal function, and so on. Feedback from acute pain units or postoperative outreach teams, and published work looking at subsequent events on the wards, suggests it is these patients who will potentially benefit from early higher levels of care rather than transfer to the ward[4,5].

Providing extended postoperative anaesthesia care for 'medium-risk' surgical patients who may struggle on the general wards is a plausible concept to address an unmet patient need, but requires three things:

1. Risk prediction – a robust triage and referral system to identify those patients who are likely to benefit.
2. A system to deliver early postoperative care – location, personnel etc.
3. Evidence of Value (outcome/cost) in order to receive administrative and funding support.

RISK PREDICTION

Who needs extended anaesthesia care (EAC)?

Identifying and managing patients at higher risk for mortality and postoperative complications should, at least in theory, improve patient outcomes, reduce postponements, unexpected overnight admissions and postoperative length of stay. Traditionally, medical practitioners, including anaesthetists, have collected 'data' via a patient history, examination and investigations and then integrated this information with their clinical experience and intuition, to help determine whether a patient is low-, moderate- or high-risk for a given surgery. This risk prediction helps guide discussions with the patient and the rest of the surgical team, thereby enabling the formulation of the optimal perioperative care path for that patient. Whilst at face value such a model of risk prediction has merit, it is difficult to qualify and quantify; and therefore, to assess. Furthermore, our patient population is getting older and presenting with a greater array of comorbidities making it increasingly challenging to provide patients with realistic expectations around the risks and value of an anaesthetic and proceeding with surgery.

In recent years, a number of risk prediction tools have been introduced in an attempt to address these shortcomings and challenges. Valid and reliable risk prediction tools cannot replace skilled information collection and analysis, but may help the medical team educate patients during preoperative consultations and the consent process, and provide an evidence base to guide triage and referral to the optimal postoperative care pathway.

The ideal risk assessment tool should discriminate well – i.e. be a good predictor of a given outcome or complication. The outcome selected must of course be relevant to the proposed use of the tool. For example, it is common to predict 30-day mortality in risk assessment tools[6], often because this is an easy endpoint to measure, but prediction of (preventable) complications may be much more relevant when looking at new modes of early postoperative care. The ideal tool should be a practical one and parsimonious, and not require the input of a plethora of data sets. Failings in these areas might be factors contributing to the reluctance of the anaesthetic community to adopt risk prediction tools into their routine clinical practise.

There are examples of predictive tools used in anaesthesia. The American Society of Anesthesiology physical status classification, grades patients based on preoperative disease severity. This relatively simple scale is a good discriminator of major and minor general risk, and is in common use by anaesthetists and administrators. However, it is often not applied precisely or consistently because of the general nature of its scoring criteria, and it does not offer a patient specific assessment. Lees Revised Cardiac Index is frequently used by anaesthetists during preoperative assessment of patients awaiting non-cardiac surgery. However, it calculates the risk relating to cardiac morbidity alone so is of limited value outside that specific application.

Although the concept of an extended recovery area appears logical, data to convince fund holders... are relatively limited

Cardio pulmonary testing (CPT) ranks patients based on functional status specifically with regard to metabolic equivalents or VO_2 (oxygen consumption) but has primarily been validated in the thoracic surgical population. Apart from the physical limitations of performing CPT on sick patients, the significant costs in implementing such a CPT program and the time lag between ordering a test and obtaining results can limit its usefulness in many patients. Anaesthetists will more commonly use a self-reporting scale of metabolic equivalents to measure patients' functional capacity and estimate aerobic and anaerobic capacities, and thereby their cardio pulmonary reserve that will enable the patient to withstand the stress of anaesthesia and surgery.

A number of risk prediction tools have been unveiled that attempt to determine the risk of mortality and morbidity for, not only a patient population, but for a given patient and for different surgical procedures. These include POSSUM,

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P-POSSUM, Surgical Risk Score and Surgical Risk Scale[6]. Such risk prediction tools estimate a given patient's risk by entering that patient's data into a multivariable model, which calculates risk. Pitfalls of such tools include, as noted above, their cumbersome nature whereby they require multiple demographic, comorbid, laboratory and intraoperative or postoperative measures. This can limit their practicality for the anaesthetist whose primary assessment in relationship to patient discussions is preoperative. The complex nature of such tools can also make them difficult for patients to readily comprehend.

Costs similarly should include costs of hospital care but also costs after discharge

The largest piece of work in this area is the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP)[7], which was developed by collecting data across nearly 400 US hospitals on 1.4 million patients who underwent surgery between 2009 and 2013. It formulated a tool that entails entering 21 preoperative factors into a web-based calculator and can be easily undertaken in less than two minutes. It generates a risk figure for a variety of postoperative complications for the individual patient, while also displaying the average expected risk for a population. It has an excellent ability to predict 30-day mortality (c=0.944) and is very good at predicting morbidity (c=0.89) and operative complications. It can be applied in a variety of surgical specialty settings and would appear to have merit in an anaesthetic application.

While not specifically designed primarily for anaesthetic use, the ACS NSQIP has demonstrated good discriminative power and calibration in heterogeneous populations and may be among the best suited to use by anaesthetists.

Whilst the preoperative anaesthetic consultation will assist in identifying likely postoperative requirements, intraoperative and postoperative events and re-assessment by anaesthetists will always be required to refine decisions on postoperative need. Some formal risk assessment tools do in fact incorporate some of these factors into their models, and it would not be a surprise to clinicians used to managing persistent hypotension, hypoxaemia and excessive sedation that PACU events add to the effective prediction of early subsequent complications[5]. Is there perhaps a golden postoperative window in which patients reveal the need for specific care not routinely available on the ward?

Thus, whilst preoperative risk prediction and advanced scheduling of postoperative facilities can be helpful in optimising hospital resources, an element of unpredicted need for higher- (and lower-) acuity postoperative care will always remain. Nevertheless, more precise preoperative planning of postoperative need has the potential to add significantly to hospital resource costs, although formal demonstration of benefit usually needs a good evidence base to justify resource allocation by fund holders.

A SYSTEM TO DELIVER EARLY POSTOPERATIVE CARE

Providing intermediary level postoperative care to select patients has been shown to have possible merit in the NHS, Swiss and Scandinavian health systems[3,8,9]. Furthermore, having a well-defined pathway of care in an anaesthetist run PACU can reduce length-of-stay, mortality and unplanned ICU admission[10]. The anaesthetist's skill-set is well suited to identifying and treating immediate postoperative problems such as hypotension, respiratory depression, hypoxia, arrhythmia, pain and bleeding. Recognising such problems in an extended recovery setting may avert the development of critical deterioration and avoid both an initial or subsequent referral for an ICU bed. Importantly, extending the recovery care avoids handover to a new team, and physical facility, with potential substantial benefits in continuity of care.

Although the concept of an extended recovery area appears logical, data to convince fund holders of likely return on investment are relatively limited[11]. The exact requirements for such units need definition, with staffing levels (anaesthetist to nursing ratios) of major relevance, but data from existing units, and the types of care provided in the HDU in the paper by Swart et al[3], start to provide the answers.

EVIDENCE OF VALUE (OUTCOME/COST)

Michael Porter's definition of Value in healthcare includes assessment of both outcome and cost[12]. This is essential in a cost-constrained healthcare environment.

It is no longer the case that costs are the domain of the administrative team, and quality of care and outcomes are the responsibility of clinicians. Instead, these groups need to work together to explore how to add value to the system. This is simpler in a system with one fund holder, and much more difficult in our system of multiple fund holders where cost shifting to another jurisdiction, or providing cost savings to someone else's budget, impair innovation and change.

Value can be added in three ways.

- Better outcomes at increased cost.
- Similar outcomes at reduced cost.
- Better outcomes at reduced cost.

Examples of the first two might include new technology or medicines (although these are increasingly being asked for evidence of cost-effectiveness), and task delegation or substitution (although these

not infrequently prove not to reduce overall costs once implemented). The last, better outcomes at reduced cost (and for practical and implementation purposes, reduced costs to one fund holder) is perhaps the Holy Grail.

Does the concept of preoperative risk stratification and extended anaesthesia care meet that challenge? The answer is it may, but we need better evidence.

The publication by Swart et al[3] provides a good place to start when planning how to collect such evidence. By the nature of its retrospective single site cohort analysis in one field of surgery, it does not itself demonstrate enhanced value. It does, however, make intuitive sense to anaesthetists, and does provide guidance for the next steps.

Based on data such as this, it is feasible to design and execute prospective trials of innovations, such as formal preoperative risk assessment and triage of medium-risk patients, to extended anaesthesia care, which formally examine the impact of patient outcomes and costs. Outcomes should include both in-hospital recovery (of major interest to hospitals), and out-of-hospital recovery (such as return to independent living or employment). Costs similarly should include costs of hospital care but also costs after discharge.

Australia and New Zealand are well placed to undertake this work based on their track record of pilot studies leading to successful multicentre anaesthesia-related trials. New expertise needs to be included, especially in the fields of health economics, but the required links already exist. Furthermore, the timing is right with a specific focus from national grant funding bodies on health service-related research. Most importantly, this is something ideally suited to our specialty. We have an existing skill-mix, we have sufficient personnel and we largely have the infrastructure already in place.

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ADVERTORIAL

MULTIMODAL ANALGESIA:
BENEFITS FOR THE POST-OPERATIVE PATIENT

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An interview with Dr Abigail Fynn:

Dr Fynn is a consultant anaesthetist at a major metropolitan hospital in Sydney. She has extensive knowledge in gynaecological anaesthetics, which she has been practicing for over 17 years.

"As an anaesthetist, I want my patients to wake up comfortable in recovery. That's my number one goal." - Dr Abigail Fynn

Multimodal Analgesia in Surgical Patients

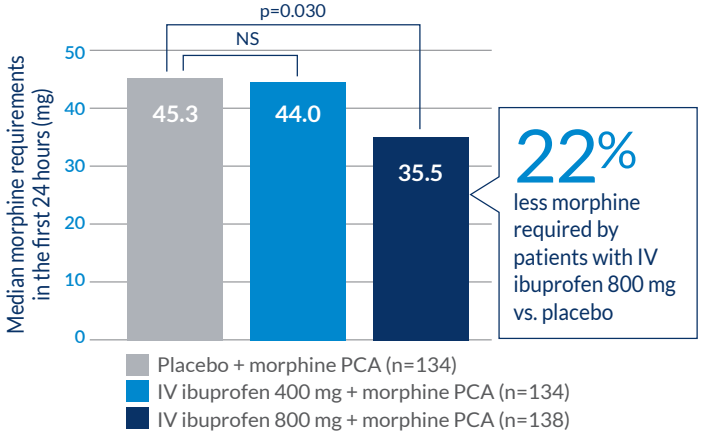
The acute pain management guidelines state that multimodal pain management (compared to mainly opioid-based analgesia) in surgical patients incorporating non-selective non-steroidal anti-inflammatory drugs (nsNSAIDs), such as IV ibuprofen: [1]

- Improves pain relief
- Reduces the use of opioid-based analgesics
- Reduces the incidence of post-operative nausea and vomiting.

Dose Ranging Study

The dose ranging study by Southworth *et al.* identified IV ibuprofen 800 mg as the optimal dose to reduce post-operative pain in a multicentre, randomised, double-blind, placebo-controlled trial of 406 patients undergoing elective orthopaedic and abdominal surgeries. IV ibuprofen 800 mg demonstrated a significant reduction in the primary endpoint of morphine usage compared to the 400 mg dose and placebo.[2]

REDUCTION IN MORPHINE USAGE WITH IV IBUPROFEN IN THE ITT POPULATION[2]



Adapted from Southworth *et al.* 2009[2]
ITT population: All patients who received at least a partial dose of IV ibuprofen or placebo. IV ibuprofen was administered *at wound closure* and every 6 hours. ITT, intention to treat; NS, not significant; PCA, patient controlled analgesia.

Adverse events and abnormalities in laboratory measurements, including bleeding, renal effects, and serious adverse events, were not significantly different between IV ibuprofen 400 mg, 800 mg and placebo groups (p value not reported) and this finding is replicated in other pain studies.[2,3]

Gynaecology pain study

The gynaecology pain study by Kroll *et al.* was a randomised, double-blind, placebo-controlled study of 319 female patients undergoing elective abdominal hysterectomy.[4] The aim was to determine whether the administration of IV ibuprofen 800 mg at wound closure and every 6 hours postoperatively could significantly decrease postoperative pain (assessed with movement and at rest using VAS-AUC scores), and PCA morphine use (primary endpoint) when compared to placebo.[4] Compared to placebo, patients who received IV ibuprofen used 19% less morphine within the first 24 hours after surgery ($p<0.001$), had a significantly shorter time to ambulation ($p=0.018$), and experienced significant reductions in pain with movement and at rest (24%, $p<0.001$ and 37%, $p<0.001$ respectively) measured from hours 12-24 after surgery. Additionally, there was no difference with respect to bleeding, bruising or blood pressure between the two groups. These findings are summarised below.

GYNAECOLOGICAL SURGICAL PATIENTS ADMINISTERED IV IBUPROFEN 800 MG EXPERIENCED:[4]

37% less post-operative pain at rest[4]

24% less post-operative pain with movement[4]

19% less rescue morphine use[4]

VAS-AUC, visual analogue scale- area under the curve; PCA, patient controlled analgesia.

"There's been a number of randomised controlled trials now, looking at Caldolor (IV ibuprofen) versus placebo. These studies have shown [that] across a number of surgeries, such as orthopaedic, abdominal and gynaecology, there's reduced pain scores and reduced morphine use post-operatively." [2,4-5*]

-Dr Abigail Fynn

*vs placebo; Caldolor (IV ibuprofen) started pre- or intra-operatively. All patients had access to morphine PCA. [2,4-5]

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FEATURE

PERIOPERATIVE MEDICINE IN THE OLDER PATIENT

Our population is ageing, so we have more surgical patients who are older and have more medical conditions. This simple statement of the obvious was the background to the October 2016 ACE Perioperative SIG Symposium, held in association with the Australian and New Zealand Society for Geriatric Medicine on 'The Elderly Surgical Patient: What matters in the End'; writes Drs Catherine Yelland, President of The Royal Australasian College of Physicians and Director of Medicine and Older Persons Service at Redcliffe Hospital & Jason Soon, Senior Policy Officer, The Royal Australasian College of Physicians.

NUMBERS

Life expectancy has increased since the 1960s from 74 to 84 years for women, and from 67 to 80 years in men[1]. This, and a fall in the birth rate, has led to an increase in Australians aged over 65 from 12.0% to 15.3% just over the last 20 years. Those aged over 85 have almost doubled from 1.1% to 2.0% of the population[2]. Older people use health services at a higher rate – 41% of hospital separations and 49% of patient days in 2015 were used by people over 65 years[3]. Our surgical teams manage increasing numbers of older people, both for elective and emergency surgery. In 2015, there were 916,987 emergency and elective admissions for surgery of people over 65 and 129,448 were for people aged 85 and older[3].

What does this mean for hospitals, surgeons, anaesthetists and staff who care for and support the older surgical patient? In general terms, these patients are more vulnerable to adverse outcomes, are likely to stay slightly longer and may need more assistance with discharge planning.

FRAILTY

Frailty is a useful concept, well-known in geriatric medicine. It describes older people who have complex, and often multiple, medical problems, some disability and require assistance for daily activities. There is reduced physiologic reserve and ability to adapt to stresses such as acute illness or trauma. The Fried criteria – weight loss, exhaustion, weak

grip strength, slow walking speed and low physical activity – may be useful in recognising this. Other definitions include polypharmacy, cognitive impairment, social supports, continence, health attitudes and quality of life. The risk of adverse outcomes is increased, including procedural complications, delirium falls, institutionalisation, disability, and death[4].

DELIRIUM

Delirium is common and under-recognised. It is characterised by a relatively rapid onset of confusion, disorientation, fluctuation in the level of awareness and arousal, perceptual changes and, at times, behavioural disturbances such as agitation. It occurs most commonly in those with 'vulnerable' brains – young children and older patients, particularly those with underlying cognitive impairment. The incidence is up to 56% in hospitalised patients, and in intensive care units may be up to 87%[5]. Recognition can be improved by the use of assessment tools such as the Confusion Assessment Method (CAM)[6] or 4 AT[7]. It is important not to miss or dismiss delirium, because management is aimed at diagnosing and treating underlying causes, and ensuring the safety of the patient during the delirious episode. Delirium is associated with an increased length of hospital stay and worse long-term outcomes[5].

ANTICOAGULATION

Many older patients are on anticoagulants, either warfarin or the direct oral anticoagulants most commonly prescribed for stroke prevention for non valvular atrial fibrillation. This often causes concern about both the risk of intra and postoperative bleeding if medication is continued, or increased stroke risk if it is stopped. Clearer guidelines are now available and the decision depends on relative risks. The role of bridging heparin or heparin equivalents is uncertain and is probably associated with more bleeding and no benefit. However, this decision should be individualised and discussed with a physician[8].

CONSENT

Consent issues may be a consideration. The patient should be able to understand not only the nature of the procedure, but the risks and benefits. Many of us seek advice from family members about important decisions – and this concept of supported decision making should be respected for older patients. Of course, the older person is also entitled to privacy and confidentiality if that is requested. If there is doubt about the cognitive ability of the patient, an opinion should be sought from a geriatrician or psychiatrist. For the patient who clearly lacks the capacity to understand the decision, or to communicate their wishes, the substitute decision maker (as defined by state law) should be contacted. Ongoing communication with families and carers is important throughout the hospital stay and during discharge planning.

MODELS OF CARE FOR OLDER SURGICAL PATIENTS

We have a long history of shared medical and surgical care of one group of patients – older people with hip fractures. Orthogeriatric care is provided by a multidisciplinary team of doctors, nurses, physiotherapists, occupational therapists and other health professionals, and is usually closely linked with aged care and rehabilitation services. It was pioneered over 60 years ago, and since then recognition has grown that the fractured hip is often a marker of frailty and is only one aspect of the care needed by older patients. Management of cardiac, respiratory and other medical conditions is assisted by physicians. Mobility, cognitive function and social conditions which may affect recovery from surgery and return to the previous level of functioning are assessed and managed by the team.

Based on what we have learnt from orthogeriatric services, care for older surgical patients should commence at the time of admission, or for elective surgery, at a preoperative assessment. In addition to the assessment of the orthopaedic or surgical condition, the need for review of other medical conditions should be considered on an individual basis. The first step is a thorough clinical history and physical examination. Routine blood tests (full blood count and biochemistry) and ECG should be done, and then as indicated, a chest X-ray or other imaging may be helpful[9].

For patients at the frail end of the spectrum, a more comprehensive assessment including cognition, nutrition, functional abilities and social supports should be undertaken to anticipate and manage the hospital stay and discharge. Dementia is not a contraindication to surgery, but it must be considered with the patient's other medical conditions and level of function and it is a significant risk factor for delirium in the perioperative period[10].

Geriatricians and allied health staff have an important role in the assessment and management of medical comorbidities, and are ideally fully integrated in the daily routine of the surgical or orthopaedic ward. The perioperative management of older people requires great attention to detail – these patients do not have the same physiologic reserve of younger patients. Fluid and electrolyte balance, nutritional intake, pressure area care and early mobilisation are important. For acute conditions, the earlier the surgery, the better, as soon as significant correctable factors have been addressed. It is known that surgery for fractured hips should be within 24 to 36 hours, and longer delays are associated with worse outcomes[12]. Speediness of treatment and discharge can help ensure that the older patient is returned to physical independence rapidly, as periods of

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immobilisation, immobility and limited weight bearing bring their own set of risks for the older patient.

INTRAOPERATIVE CONSIDERATIONS

The following considerations may be of relevance in managing older patients:

- Regional analgesia may be preferred because it reduces postoperative confusion, (patients on dual antiplatelet therapy may be an exception)[11,13].
- Urinary catheters should be avoided where possible.
- For patients not on regular oral anticoagulants, perioperative low dose heparin and low molecular weight heparin can reduce the risk of deep vein thrombosis and pulmonary embolism[14]. Where anticoagulants and antiplatelet agents are contraindicated, mechanical devices should be used[15].
- Blood transfusions for preoperative anaemia, either acute or due to iron deficiency, should be limited, Perioperative transfusions are associated with decreased overall survival rates[16]. Patients with chronic iron deficiency without haemodynamic instability (even with low haemoglobin levels) should be given oral or parenteral iron[17]. Routine blood transfusion in asymptomatic patients with a haemoglobin level more than 80g/L is generally not indicated[18].

POSTOPERATIVE CARE

After surgery, the progress of the older patient should be assessed each day. For patients who have significant medical conditions, a physician or perioperative medicine service should continue to review the patient. This should include coexisting medical conditions, analgesia (often in conjunction with an Acute Pain Service), medications, cognition and mobility. Reducing the number of ward transfers is important for older patients, as it tends to increase confusion, complicate communication and discharge planning and increase length of hospital stay.

We have learnt many lessons from orthogeriatric care:

- Early mobilisation should start as soon as possible – e.g. for patients with a hip fracture, within 24 to 48 hours of treatment[19] as it accelerates functional recovery in previously community dwelling patients[20].
- Nursing care should encourage the physical independence of the patient. It should include ongoing monitoring and appropriate management of signs of common complicating conditions such as delirium, pressure areas, urinary retention and constipation.
- It is important to identify and actively manage delirium, which is more common if the patient has an underlying dementia. The role of medication in delirium remains controversial, and the emphasis should be on the environment and nursing care.
- Coordination of care is important. There is evidence that care programs work better with one person nominated as coordinator[21].

REHABILITATION AND DISCHARGE PLANNING

In general, older people recover more slowly from illness, trauma and surgery. Many patients will need a period of rehabilitation to return to their previous level of function. This may be provided at home, by Community Rehabilitation Services or the Community Transition Care programme, in Residential Aged Care Facilities (the Transition Care Programme) or on an outpatient basis in Day hospitals or with private therapists. Often this requires a co-resident carer. Other patients still need considerable nursing care or assistance with mobility and will need inpatient rehabilitation. These services have grown with the increase in the older population and are accessible from most hospitals. The essential elements are:

- Well-coordinated multidisciplinary care.
- Early individualised treatment plans.
- Good communication with families and care providers.
- Discharge planning, done by staff with a comprehensive understanding of the patient and the service available in the community.

SUMMARY

Older patients are more vulnerable, but most will have a good outcome after surgery and return to their previous home and lifestyle. Understanding the needs of this group and designing our hospital wards and medical and nursing care to meet these is essential if we are to provide what we all want for every patient – good care, given compassionately and effectively, with a good outcome, which has met all the expectations of the older person and their family.

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FEATURE

THE FUTURE OF PERIOPERATIVE MEDICINE

Although the term 'Perioperative Medicine' has been in medical literature for more than two decades, there has recently been an increase in interest, and even excitement, in this development and the implications for the speciality of anaesthesia, writes Dr Ross Kerridge.

This includes the ongoing debate about the possible development of the anaesthetist as a 'perioperative physician'. Importantly, this surge of interest in perioperative medicine is not just happening in Australia. It is a worldwide phenomenon; but is it a fad? It is worth reflecting on what has changed in the last 20 years, and what the future holds for the profession.

With regard to preoperative patient care, there has been a very visible shift in perioperative practice. Twenty years ago, most patients were admitted to hospital the day before surgery, and preoperative preparation started on arrival in hospital. Some paint a rosy picture of 'the good ol' days', and attribute recent changes to Day of Surgery Admission to cynical cost-cutting. Realistically, the previous system was anything but perfect. Early admission was a waste of time for healthy patients. For complex patients and procedures, the quality of preoperative preparation was suboptimal, with avoidable delays, cancellations and postoperative complications.

In the past, the anaesthetist's first contact with the patient was commonly a source of great frustration. Patients would be seen late in the afternoon or in the early evening, at the end of a hard day in the operating theatre. In accordance with Murphy's Law, the most complex and poorly prepared patient was often the last one to be seen, had limited understanding of their medical history, had forgotten to bring in their regular medication (and were sometimes not sure what they were anyway!). The anaesthetist would be faced with a difficult decision – whether to postpone or reorder the list for the next morning – but would generally grit their teeth and accept the situation as their regrettable lot in life. The good ol' days weren't as good as some would now recall. On the other hand, the presence of the anaesthetist on the ward late in the afternoon, particularly in teaching hospitals, raised our profile

with junior medical officers and ward nurses. Occasionally, we were able to sort out their problems and, in some cases, they remained forever grateful.

ANAESTHETISTS LEADING CHANGE

In Australia, we have been lucky as a specialty, as many anaesthetists recognised the shortcomings of the old preoperative processes and realised that change was certain. By anticipating the inevitable, they were able to provide leadership, actively participate in the expected changes and develop innovative new approaches to the clinical challenges of modern medicine.

In both public and private settings, most hospitals now have a more consistently organised approach to early preoperative information gathering, patient assessment and coordination of preparation. Patients are developing an expectation that there will be some early clinical communication on behalf of the anaesthetist, and understand that a preoperative face-to-face consultation may be required in a hospital clinic or consulting rooms, particularly for sicker patients and prior to complex procedures. Some more innovative anaesthetists have developed technology based systems to communicate with their patients preoperatively and for patient follow-up. In all settings, leadership by anaesthetists has been a key factor in determining whether these changes are introduced successfully or not.

Postoperative care has changed as well. Cost constraints and bed shortages have been a driver to change clinical practice towards earlier postoperative discharge. But the incentive to change has also been clinically driven. Clinicians have become more aware of the 'simple' dangers of the postoperative phase of care. Rather than looking for dramatic 'silver bullet' medical advances, there has been increased recognition of the potential for improvement just through better planning, communication and coordination, and developing systems to make sure the basics are done right.

There is also greater concern about the problem of delayed response to postoperative complications, and 'Failure to Rescue'. Most complications are, at least initially, simple and can be appropriately dealt with by early intervention. However, this requires a systematic approach to the detection of, and response to, patient deterioration.

Anaesthetists have played a significant role in these and many other changes in the organisation of clinical care. Historically, it is also worth remembering that centralised Postoperative Recovery, and Intensive Care Units developed under anaesthetic leadership. Systematic postoperative review, outreach or surveillance teams and postoperative acute pain services have also improved clinical care by better organisation and coordination of care.

A recurrent theme in these changes has been clinical leaders recognising a variety of problems that could be improved by better organisation and coordination of simple clinical care. It has not been a matter of dramatic scientific discoveries, although the changed processes and systems of care have sometimes provided a setting where great technical and scientific discoveries are possible.

So, what is the future? Regardless of names, the future system of perioperative patient care should be an integrated, coordinated process that starts at the time of contemplation of possible surgery and proceeds through assessment, preparation, operation, recovery and convalescence. Care must be delivered by multiple specialties and disciplines, but it must be systematically organised and coordinated, patient-focussed and clinically led.

A GLOBAL MOVEMENT

The scientific evidence for the perioperative system can be debated, but the pragmatic reality is that it is being adopted internationally and adapted to the setting in which it is being applied. In Australia and New Zealand, it is commonly referred to as the Perioperative Model of Care. In the US the Perioperative Surgical Home is being advocated widely, although there are differing opinions within the anesthesiology community about this. In the UK, the Royal College of Anaesthetists is leading the adoption of Perioperative Medicine as the optimal model of care for surgical patients. In Europe, the development of the concept of Enhanced Recovery After Surgery (ERAS) is a local adaptation of the same principles. Thus, although there are local differences depending on the national setting and the public or private sector, the model appears to be accepted as appropriate for surgical care.

Given that this appears to be the future of organisational aspects of such care, what will be the implications for anaesthetists? Any time of change presents opportunities and threats and I believe that anaesthetists have a critical role in the future ongoing development of Perioperative Medicine.

THE BROADER CONTEXT

Future developments will be influenced by changes in the population, in the health system, in hospitals, and in the culture and expectations of our surgical colleagues.

The surgical patient population is getting older, with more comorbidities and having more complex procedures. These changes will continue to increase the need for optimal preoperative preparation and the requirement for better systems to deal with the dangers of the postoperative period.

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In Australia, our General Practitioner colleagues had been undervalued and under-supported for many years. Unfortunately, our hospital systems are sometimes built on a presumption that the patient's GP exists, and will sort everything out. This is not the reality. Some estimates suggest that 40% of Australians do not have a 'medical home'. In planning patient care systematically, we cannot presume that a patient's medical problems will have been appropriately investigated and treated. Nor can we presume that it is always safe to discharge a patient postoperatively, presuming that the GP will be available and capable of providing the ongoing post-surgical care.

Governance and funding systems of hospitals are changing. Activity Base Funding in the public sector, and commercially aggressive insurers in the private sector, will increase the focus on reduction of process costs (in the US, the move to 'Bundled Payments' is exerting the same influence). The operational differences between the public and the private sector are going to become less and less obvious for the day-to-day clinician.

Surgeons are changing. They are highly focussed on a particular specialty (or sub-specialty) area. They do not claim to be omniscient, and are more comfortable sharing work in teams. A generation of surgeons is now emerging who have been trained in hospitals where anaesthetists are strongly involved in preoperative patient preparation, and in postoperative care. They respect our specialty and welcome working with anaesthetists who take an active interest in perioperative medicine, and who are prepared to be involved in a co-management situation with their surgeon. It may be that surgeons will consider these expectations when choosing which anaesthetist to work with in the private sector.

CHALLENGES FOR THE FUTURE

There are a number of important developments that will shape the future of perioperative medicine. These include preoperative optimisation, high-stakes decision-making; postoperative care systems; co-management with surgeons, (particularly in regional setting), future training for anaesthetists, changes in research, and changes to fees and funding models.

'Prehabilitation' is a relatively new idea reflecting increasing recognition that many patients may benefit from interventions to optimise their health in the preoperative period. This includes managing chronic medication, smoking cessation, exercise, weight loss, psycho-preparation, haematinics, and other interventions. In the past these interventions were not known of, were not considered possible, or the logistical challenges were overwhelming. The development of systematic, co-ordinated and managed preoperative preparation processes make it realistic to establish these programs.

'High-Stakes decision-making' is increasingly required when contemplating major surgery in high-risk patients. It is appropriate to have medical involvement independent of the surgeon who will be performing the operation. Perioperative decisions must consider the patient's health factors, implications of the surgery, the requirements for hospital capability and constraints, and the patient's values. Anaesthetists have the appropriate perspective to take a key role in these discussions, particularly for high-stakes decisions.

In the postoperative phase, there has traditionally been an assumption that patients placed in intensive care will have better outcomes. The European Surgical Outcomes Study (EuSOS) suggested that access to a postoperative ICU was a major determinant of preventable postoperative deaths. The resources required to send all 'sick' patients to ICU are enormous, and thus access to intensive care is restricted. Alternative models of postoperative high dependency care may need to be developed.

Consider a comorbid patient having major abdominal surgery that has gone 'reasonably well', where the patient needs very close watching in expectation of ongoing recovery, but does not need active intervention. Is this "complex but uncomplicated" surgical patient most appropriately cared for in a modern intensive care unit? Intensive Care Medicine is now a practiced by intensivists trained to deal with the complicated acute medical catastrophe. They may have less familiarity with surgery and the perioperative environment than (perhaps) intensivists of the past. The cultural influence on 'junior' medical and nursing staff may lead to a mind-set, decision-making and behaviours that is not optimal or efficient for 'uncomplicated' (though complex) postoperative patients.

The patient may be better suited to remaining in the anaesthetic/surgical milieu of the Post Anaesthetic Recovery Unit, rather than ICU. One approach developed in a British hospital is the 'Overnight Intensive Recovery' which has formalised keeping patients in the postoperative recovery area for a limited period (e.g. 18 hours) postoperatively, with the expectation that they will then either go to the surgical ward or be formally admitted to intensive care.

Co-management, I believe, will be the future of surgical care – one of collaborative team-work with the surgeon, anaesthetist and other physicians working as a unit. In the United States, the widespread development of 'hospitalists', working with surgical teams, has indicated the potential for

this development. This has not occurred widely in Australia, but does indicate the potential for 'co-management' models. In large tertiary hospitals, this may be formalised with preoperative clinics and services, and formal postoperative structures. In the private setting, it may be a more informal arrangement between a small group of colleagues. It will be supported by smart technology to facilitate communication between the hospital nursing staff and the clinicians involved. Clearly, the anaesthetist who takes an active interest in the preoperative assessment and preparation of their patients, and is prepared to be involved in co-management of the patient postoperatively, will be a most valued member of the team.

The remote and regional geographical settings of Australia pose special challenges. In outer metropolitan or regional centres, surgery will be performed by a surgeon who comes from a distance, performs surgery, and then leaves the patient under remote supervision. Even with ubiquitous telecommunication, a 'junior' medical officer may need experienced eyes and ears 'on the ground'. Patient outcomes may be improved if the patient can be reviewed on behalf of the surgeon by a 'senior' experienced colleague with close understanding of the surgical intervention, who is capable of supervising all aspects of the postoperative care of the patient (other than re-operating). There may be times that require a senior Doctor who can communicate directly with the staff, the patient or the family credibly and authoritatively as part of the surgical/perioperative team. Anaesthetists are the most appropriate non-surgeons to be able to fill this role.

The training implications for anaesthetists are significant, but have been anticipated by Colleges both in Australia and in other countries. It will not be enough to be the 'king of the operating theatre' – anaesthetists will need to know their medicine and surgery more broadly. For many this will be nothing new – there is an old saying that "you can't be a good anaesthetist unless you understand what the surgeon is doing". Anaesthetists have often complained that their medical status is, at times, unrecognised. In the past, there were systemic barriers meaning we were unable to use our extensive general medical knowledge to be involved in the active preparation and postoperative care of the patient. This is no longer the case. In the future, the anaesthetist will be able to use their broad medical training and perspective – and this will be the expectation.

There will be implications for research as well. Narrowly focussed trials such as those comparing 'me too' drugs, or studies observing effects on surrogate outcome measures have been challenged as being of little worth in the 'real world'. Large, pragmatic, 'simple' trials have provided answers using patient-focussed outcomes. The future may be to move to massive registry studies, using the power of 'big data' to identify disease patterns and associations that would otherwise not be apparent. Perioperative research of the future will be a collaborative effort involving anaesthetists, surgeons and other doctors looking across the whole episode of perioperative care. Areas of interest will include optimisation of comorbidities such as diabetes, cardiac failure or frailty; techniques to minimise inflammation at the time of surgery, and interventions to improve functional recovery postoperatively.

Finally, fee structures and funding models for anaesthetists will have to change. Under current funding arrangements, these new areas of work are not remunerated adequately. Some may resist adapting to these new ways of working because 'we are not paid to do it'. Those who have more foresight will see that in both the public and private sector, sometimes change must anticipate the future, even though it may cause some financial pain in the short-term. In the public sector, departments should maintain and build support for preoperative services, and plan to support anaesthetists' more active involvement in postoperative care, even if hospital administrators are reluctant to commit resources for this service. In the private sector, we should accept as professionals that some of our work, such as preoperative consultations and postoperative follow-up visits, are not as remunerative as other aspects of our work. Nevertheless, as professionals we should be providing these services.

The future of perioperative medicine is clear. Whether this is seen as a promising, rosy future or whether it is regarded as an unfortunate reality is, perhaps, in the eye of the beholder. What is certain is that the wave is coming. The implications for anaesthetists are profound. Most of us wish to be recognised as knowledgeable and highly-skilled; and respected as consummate professionals. Our active involvement in perioperative patient care is good for patients, it will be expected by surgeons, and ultimately it will be good for us.

A referenced version of this paper is available on request.

FEATURE

ANZCA'S APPROACH TO SUPPORTING & DEVELOPING PERIOPERATIVE MEDICINE

As specialist anaesthetists, we all contribute expertly to the care of our patients before, during and after surgery, writes ANZCA President Professor David A. Scott.

It is well recognised however, that for many patients today the scope of such care needs to extend from the time that surgery is being considered to the point whereby a patient is on an independent recovery pathway. This is because, for an increasing number of situations, surgery is complex, patients are complex and our healthcare system is complex. Within this, anaesthesia and acute postoperative care are managed intensely and tailored to individual needs – this clearly interacts with how the patient is prepared for this potentially challenging experience, and how their recovery is managed. We are now confronted with Enhanced Recovery After Surgery (ERAS), same-day admissions, hospital in the home and discussions of futile or inappropriate surgery. It is into this environment that ANZCA has formed a strategy to address and best support the needs of our patients and those of our fellows.

The potential role of specialist anaesthetists in perioperative medicine (POM) is not new. In 2005, the ANZCA POM Taskforce Report was released, which recognised the need for the College to embrace POM. At that stage, one recommendation involved including 'Specialists in Perioperative Medicine' as a subtitle to the name of the College, which has subsequently been recognised by the inclusion of Perioperative medicine in the mission statement of the College. This is not trivial 'corporate-speak' because the mission of any organisation could just as well be described as its *purpose*. Perioperative medicine is one of the three pillars of the College's purpose along with anaesthesia and pain medicine. Since that report, numerous POM 'green shoots' have sprung up throughout Australia and New Zealand and the rest of the developed world in a number of forms – perhaps the most prominent being the Royal College of Anaesthetists POM vision statement released in 2015, and

the Perioperative Surgical Home from the American Society of Anesthesiologists.

Justification for the development of increased, and perhaps formalised, POM knowledge and skills has been presented many times, including in other articles in this issue of *Australian Anaesthetist*. We have always been doing it, but we need to be doing it more, and in some cases, better and in a more organised fashion. There is a 'gap in care'. Many physicians have identified this and become 'Perioperative Physicians' some via the RACP General and Acute Medicine Advanced Training pathway, although there remains a limited understanding of what occurs inside the operating theatre. Simultaneously, the geriatricians have significantly improved outcomes with orthogeriatrics. Our intensive care colleagues look after postoperative patients and are increasingly becoming involved preoperatively to discuss realistic expectations from surgery, treatment limitations and end-of-life planning. Some of these skills are advanced and need to be taught and assessed in a robust and transparent manner.

The approach that ANZCA has taken recognises that all specialist anaesthetists are trained in, and have skills in perioperative medicine. It also recognises that a large majority of fellows continue to have a desire to maintain knowledge and skills in this area – as reflected by the overflowing attendance and engagement at the ACE Perioperative SIG meeting held in 2016. There are also anaesthetists, and specialists from other disciplines, who have a desire to have a greater engagement in POM, to be more highly trained and potentially to practice at a sub-specialty level. It is this latter concept that provides the greatest challenges to the College and specialty, but also the greatest opportunity.

In 2015, ANZCA convened a POM Working Group, chaired by Dr Sean McManus, to: i) review the status of POM in Australia and New Zealand; ii) identify approaches elsewhere in the world; and iii) make recommendations regarding the direction that ANZCA should take. Following wide consultation, in 2016 ANZCA decided to tackle the issue with a formal two-tiered approach: 1) ensuring effective and appropriate POM training for all trainees through the FANZCA curriculum so that all FANZCAs will be 'practitioners of POM'; and 2) establishing a post-Fellowship qualification so that interested FANZCAs (and potentially other specialists) can go on to become 'specialists in POM' and to be described as such. This strategic approach recognises that there are unique challenges in Australia and also New Zealand that mean we cannot declare that anaesthesia is at the forefront of POM (as our UK colleagues have done) without demonstrating our bona fides to other specialties already in the space.

We have always been doing it, but we need to be doing it more, and in some cases, better and in a more organised fashion

This is critical to appreciate. As mentioned, throughout Australia in particular, but also New Zealand, in both public and private practice, there are an increasing number of physicians, and a few intensivists, who are practicing in this field and referring to themselves as 'perioperative physicians'. There are also a number of physician-based named POM 'services' established in public hospitals. Undoubtedly this is an area of interest for our physician colleagues too and we must lead a collegiate and collaborative response to this engagement (and expertise) which includes establishment and affirmation of the expert contribution that specialist anaesthetists can make in this area. Such collaboration at the level of 'sub-specialisation' (whatever form that will take) will have a flow-on benefit in that it will heighten the understanding and appreciation that our colleagues from other specialties will have of *all* anaesthetists in patient care and management.

In addition to the two elements of ANZCA's approach listed above is also added: support for ongoing education and training for all specialist anaesthetists in POM. Thus the approach by ANZCA can be summarised as:

1. Ensuring that the ANZCA training curriculum equips the graduate FANZCA with the necessary skillset to manage perioperative care of patients effectively and collaboratively. The ANZCA curriculum already meets most of these criteria.
2. Maintaining and extending education and training opportunities for all anaesthetists to continue to maintain and expand their knowledge in perioperative medicine. This is important and applies to conferences such as the ASM and the NSC, SIG and regional/NZ CME meetings and other College resources, including online offerings. The ANZCA/FPM book *Acute Pain Medicine: Scientific Evidence* 4th edition is one example of a comprehensive resource provided freely to all fellows to support the pain medicine aspect of perioperative care.
3. Development of a formal qualification in Perioperative medicine. This is now being scoped and would require a primary specialist qualification. There exist a number of courses around the world in POM, including one based at Monash University in Melbourne. These courses provide a knowledge component and, provided the curriculum content is consistent with that determined by ANZCA, then the step to credentialing in POM by ANZCA might involve some form of appropriate clinical practice experience with verification. These details are yet to be resolved.

Establishment of such a qualification will require consultation with the other specialty colleges involved with

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perioperative care. The large, but not exclusive, in-hospital component means that, in particular ANZCA, RACP and most probably CICM, are the key groups involved. RACS likewise is a stakeholder, as are GPs. Appropriate communication with, and involvement of, ASA and NZSA is also important of course.

A number of potential concerns should be considered:

- *Formation of a formal qualification in POM will disempower 'non-qualified' anaesthetists from practicing in this area*. The outcome will be quite the opposite. The 'right' for all anaesthetists, physicians and surgeons to be appropriately involved in the perioperative care of their patients will be preserved and likely enhanced by the presence of a more formalised qualification. Awareness of our skills in a broader sense will be increased and, for physicians in particular, awareness of the value of the knowledge we have of the acute intraoperative management will be heightened.
- *The practice of POM will be constrained to those 'qualified'*. As above; all specialist anaesthetists are, and will continue to be, practitioners of POM. Individuals will vary, with some choosing a very 'tight' perioperative model, whilst others might be more broadly engaged.
- *Collaborating with other specialties means that they might take on roles in clinical anaesthesia*. This is not the intention nor is it possible. The clear position of ANZCA is that anaesthesia should be provided by specialist anaesthetists whenever possible. Furthermore, it is no more possible for a physician using a perioperative medicine qualification to undertake anaesthesia than it would be for an anaesthetist with the same qualification to undertake interventional cardiology. Any attempts at practice 'creep' would be strongly opposed.
- *Perioperative medicine is not cost-effective for either the practitioner or the health system*. The wide acceptance internationally of some form of perioperative care model reflects the perception that there are tangible benefits to the patients and community. Complications and delays in treatment and recovery are expensive and resource intensive, so there is an empirical justification (and some health economic data) for more formalised perioperative management. At a hospital level, it is sometimes hard to make the case. For practitioners, 'perioperative' physicians already exist in private and public environments but undoubtedly there is a need for retention and improvement in remuneration structures. The ASA has a key role in this area.

The key is planning and managing the appropriate path for each patient.

- *POM will break away into a separate specialty like Intensive Care*. At this stage, there are no plans for even a Faculty to be formed. It is hard to envisage enough 'space' between ANZCA, RACP and CICM to make such an entity viable. In fact, by being proactive and bringing POM under the ANZCA umbrella, regardless of original qualification, we have far more influence on the development of the sub-specialty than we would if we excluded others.

It is worth emphasising that POM is a collaborative and 'open' area of practice. It necessarily involves communication with a range of practitioners involved in perioperative care. At its simplest it may just be the anaesthetist and surgeon managing a low-risk situation. At high levels, for more complex scenarios, it could involve a range of specialists and healthcare providers, linked together as in the UK model with the perioperative medicine specialist being the unifying force. There are many levels in-between. The key is planning and managing the appropriate path for each patient.

ANZCA has proceeded to develop a strategy for perioperative medicine – we consider that elements of perioperative medicine should continue to be a core part of our specialist training, but also that the opportunity should exist for those with a particular interest to become credentialed in some way regarding increased knowledge and skills. For specialist anaesthetists, this would involve broadening training in aspects of internal medicine relevant to care in preparation for surgery and following surgery; for physicians this may involve some broadening of these areas but also (and importantly) in gaining detailed understanding of how anaesthesia and surgery impacts on patients, what options exist for intra and postoperative care, and also aspects of pain medicine and other acute interventions. We do not believe that a Faculty is called for at this stage, but a common/shared qualification in perioperative medicine would be a worthwhile goal. It would not be for anaesthetists to become physicians nor physicians to become anaesthetists. Much management would be by appropriate consultation and referral, improving the integration and quality of patient care. There is of course a challenge for anaesthetists to continue to adapt to the increasing complexity of perioperative care, but we need not fear this change, and the specialty will thrive because of it.

BRIDGING THE ELEMENTS

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FEATURE

THE SOLUTION TO STARVATION IS A SOLUTION

Are your patients comfortable before surgery, asks Dr David Reiner from Canberra? Patient experience before surgery has hardly changed since 1946 when the term 'Mendelson's Syndrome' (aspiration pneumonitis) was coined following the New York obstetrician's landmark paper. Since then, prolonged starvation before anaesthesia has been almost uniformly enforced and the original advice of "nil by mouth from midnight" is now culturally entrenched.

Despite attempts at modernising the fasting guidelines, there has been widespread confusion and a resolute resistance to improving overly restricted and potentially harmful practices. Considering the complex nature of the current guidelines, this is not overly surprising.

Since intra- and postoperative care have improved significantly since 1946, its about time we modernised the preoperative stage. There is no reason that, in 2017, we continue to inhibit the comfort and metabolic optimisation of patients before surgery.

My proposal is to introduce a standard carbohydrate drink to our hospital drug formulary for the reasons listed in the bullet points below. If a new drug listed on the pharmaceutical benefits scheme (PBS) achieved a fraction of the benefits it would be considered a success. The 'drug' would become part of our protocols. Such successes are generally driven by pharmaceutical companies with large marketing budgets.

Currently, there is no patent or PBS item number available for preoperative drinks. The concept of carbohydrate drinks is already one in the public domain. The inability to get a patent means big pharma and big marketing budgets will never be allocated to this area. It is my view that this is one of the reasons why it has been so difficult to reform preoperative care protocols.

Despite fasting guidelines having advanced over the years, this has not translated to a change in practice or a better patient experience. Patients, especially the elderly, continue to arrive to the operating theatre uncomfortable due to starvation, and in a less-than-ideal metabolic state.

Such fasting regimes may put the body in a dehydrated and catabolic state, where the body is basically breaking down protein to provide energy. Headaches, nausea, lethargy, thirst and hunger are common. Stimulating the main anabolic hormone (insulin) immediately prior to surgery puts the body in a better position to commence healing and recovery and mitigates the stress response associated with surgery.

Changing the starvation culture is a major logistical and cultural challenge. Currently, it is not a high-profile problem and yet some simple and inexpensive changes can improve the comfort of patients with minimal effort and improve clinical outcomes.

A simple carbohydrate drink introduced to the preoperative stage can prevent starvation, allows metabolic optimisation of patients and has the following evidence based features and objective clinical benefits:

- Good safety profile
- NNT=1 (for subjective benefits)
- The mechanism of action is understood
- Rapid-onset
- Simplifies fasting instructions
- Immuno-protective
- Designed specifically for surgery
- Rapid gastric emptying
- Improves outcomes postoperatively
- Minimises insulin resistance
- Oral administration
- Large therapeutic window
- No needlestick injuries

In my view, what is now needed is a clear, simple, specific and unambiguous fasting guideline, which would be considered a "prescription" by the patient and include instructions on what to consume and when to consume it.

A simple double-sided fasting card would be easy to follow (Figure 1). There would be lines where the anaesthetist can write patient-specific/medication notes. Hospital clerks like the card, as their phone call is brief. They need to only tell patients two things: the admission time and to follow the fasting card. Patients present to theatre comfortable, nourished, energised, headache-free, anabolic and primed for recovery. Patients are more likely to be in a good mood before their procedure.

Figure 1: Side A and B of suggested Fasting Card.

Our college fasting guidelines explicitly mention that we may consider prescribing carbohydrate drinks specifically formulated for surgery (PS07). But ANZCA produce guidelines which are aimed at the profession, not at patients or other hospital staff. Giving patients a piece of a paper that is essentially the ANZCA fasting guidelines does not result in patients choosing the best option, with starvation the common result. The role of our profession is to interpret the guidelines for the patients and hospital staff. It is my suggestion that the simplest way of doing this is to present a clear, patient focused guideline by 'prescribing' one calorie-rich form of hydration specifically developed for surgery. As such, I have developed the maltodextrin carbohydrate drink "Dex" with this simple aim in mind.

WHAT TO CONSIDER PREOPERATIVELY

Coordinating a patient for surgery is a complex task and the routine practicalities in managing this task need to be contemplated.

For example, calling patients to provide fasting information is critical for safety, but it is also a mundane and repetitive role that anaesthetists are generally eager to avoid.

Hospital staff (mostly non-medical clerks) are therefore tasked with providing patients fasting instructions, usually the day before surgery.

Patients are called, or seen in a pre-admission clinic before surgery. During the consult, there is no focus on preoperative nutrition. Instead, prospective, nervous patients are presented with a confusing picture of multiple options. For example, black coffee, no milk in tea, juice but no pulp, food six hours before, clear fluids two hours before, etc. Patients understandably take home the message that they might die if they eat or drink anything they should not, and that their surgery will be cancelled if their allocated anaesthetist finds out that they didn't comply. Patients therefore often choose to starve. Nurses and clerks have not necessarily been educated to understand that the stomach is more empty two hours after drinking clear fluid, compared to the residual gastric volume if a patient has starved themselves.

Patient anger, dissatisfaction with the hospital, disruption to ward tranquillity, complaints and aggression to nursing staff all arise when patients are hungry and thirsty.

FEATURE

When complete oral abstinence is presented as being equivalent, if not more superior, to having a liquid meal, the result will inevitably be patients starving themselves as they attempt to be "more safe". This is bad practice and harms the patient.

As anaesthetists, our responsibility does not start when surgery commences. It should begin much earlier. It is critical that we, as a profession, take it upon ourselves to improve fasting instructions.

WHAT DIFFERENTIATES A SURGERY-SPECIFIC DRINK?

A suitable drink is one that is designed to minimise the likelihood of aspiration and to reduce morbidity if aspiration occurred. Basic principles include:

- pH>3.5 (Increasing pH-> less damage in event of aspiration, not too high due to rebound acidity).
- low osmolality to facilitate rapid gastric emptying (trick duodenal osmoreceptors).
- calorie-dense to stimulate an insulin "meal response" – anabolic metabolism.

Figure 2: An Australian made preoperative surgery specific complex carbohydrate drink.

- volume < 200mls (to enable hourly consumption compliant with guidelines).
- palatable on an empty stomach for patient compliance.

The Role of the Profession

The profession can make big changes by thinking of preoperative hydration and caloric intake on the day of surgery as under our direct control. Non-medical clerks and the nursing profession want, and need, simple, easy-to-follow instructions, rather than five options and a risk analysis for each. It is the profession's role to undertake the risk analysis for the patients and the non-medical staff based on the ANZCA guidelines and evidence available.

WHAT IS THE SUPPORTING EVIDENCE?

Emergency departments – a special group

Excluding abdominal pathology patients and major trauma, patients who are awaiting surgery or surgical review should be offered 200mls of a maltodextrin drink every hour. The concept of "we will keep you fasted in case theatre becomes available" is no longer appropriate. Patients should only begin fasting from fluids when the patient has been allocated a specific theatre time. Too many elderly patients are presenting to theatre in a poor metabolic state. One prominent Sydney hospital offers all surgical patients a drink every hour and if the anaesthetist doesn't want this to happen she/he must cancel the standing order. The default is to nourish the patients, not starve them – which is sensible.

Insulin resistance: current research

We know there is a direct relationship between insulin resistance and infectious morbidity, including surgical site infections (SSI).

Evidence exists that 50g of maltodextrin taken before surgery has the beneficial effect of reducing insulin resistance postoperatively. This is one of the proposed mechanisms for carbohydrate drinks taken preoperatively, decreasing a patient's length of stay compared to a placebo drink (Cochrane Review 2014, Systematic review 1976 patients included).

Interestingly, dexamethasone (one of the drugs we commonly use) is thought to have the negative effect of increasing insulin resistance postoperatively, and major research is due to commence to research the effects of dexamethasone on SSIs. It will be useful to know whether a single dexamethasone dose has an impact on SSI. Although intravenous drugs attract research money, and a simple cheap drink which seems to reduce insulin resistance in a variety of surgical patients postoperatively is more mundane, it also warrants further consideration.

WHAT ARE THE STANDING CHALLENGES?

The first challenge is acknowledging that a problem exists. The second challenge is empowering anaesthetists to act. Recognising that revisiting fasting instructions will never be a priority for the profession, I am trying to simplify this process and I welcome being contacted.

The third challenge is that this is not a field that needs or attracts the deep pockets of big pharma and therefore, there is not the external commercial and economic pressure for change to occur.

SUMMARY

The hours leading up to surgery are stressful for patients. We as anaesthetists are great at responding to deviations from normal on our monitors during an operation, we also anticipate and minimise pain issues postoperatively. We have a responsibility to begin anticipating and preventing the problems that arise preoperatively. We can do this very simply, by guiding patients to hydrate with complex carbohydrates in a clear,

unambiguous and safe manner before an operation.

Fasting is a necessity for a safe surgical journey, we are dismissive of the impact we can have on the unpleasant side effects. Prescribing a single type of carbohydrate drink is a major advance in simplifying and improving the surgical journey.

Declaration of conflict

Dr David Reiner is a Canberra based anaesthetist and the Medical Director of Dex, a long-term project which includes the development of a pre-surgery nutrition drink and the introduction of pre-surgery fasting instruction cards to Australian hospitals.

The Australian government has provided funding and resources to help launch this project through a significant grant. A number of doctors, dietitians, food technologists and a generous beverage company have donated considerable time and resources to this project.

Table 1: Evidence for preoperative carbohydrate drinks

Article	Conclusion/Result	Study details
Nygren, J et al. (2015). Preoperataive oral carbohydrate therapy. Current Opinion in Anaesthesiology 28(3):364-369	Carbohydrated drinks attenuate post operative insulin resistance, improve metabolic response, enhanced perioperative well-being and improve clinical outcomes.	Review of literaure.
Singh, B.N., et al (2015). Effects of preoperative carbohydrate drinks on immediate postoperative outcome after day care laparoscopic cholecystectomy. Surgical Endoscopoy 29(11):3267-3272	Carbohydrate drinks minimised postoperative nausea, vomiting and pain in patients undergoing outpatient cholecystectomy. There were no additional compilcations due to the carbohydrate drinks (compared to placebo and NPO).	120 patients (3 groups, carbohydrate drink, placebo drink, NPO).
Smith, M.D., et al. (2014). Preoperative carbohydrate treatment for enhancing recovery afer elective surgery. Cochrane Database of Systematic Reviews 8:CD009161	Patients given carbohydrate drinks when home between 1 and 13 hours sooner than those given a placebo drink or nothing to drink at all	Systematic Review including 27 trials 1976 patients (Abdo, Ortho, Cardiac, Thyroid surgery included).
Bilku, D.K., et al (2014). Role of preoperative carbohydrate loading: systematic review Annals of The Royal College of Surgeons of England 96(1):15-22	1. Insulin resistance was significantly improved with a carbohydrate drink 2. Hunger, thirst, malaise, anxiety and nausea all improved with a carbohydrate drink.	Systematic Review including 17 RCT with 1445 patients.
Zelic, M., et al. (2013). Preoperative oral feeding reduces stress response after laparoscopic cholecystectomy. Hepato-Gastroenterology 60(127):1602-1606	Carbohydrate rich beverage patients demonstrated lower stress response using the marker of C- Reacitve protein and cortisol level responses compared to having no oral intake before surgery.	
Jones, C., et al. (2011). The role of carbohydrate drinks in pre-operative nutrition for elective colorectal surgery. Annals of the Royal College of Surgeons England 93(7):504-507	Shorter hospital stay, quicker return of bowel function, less loss of muscle mass.	
Lauwick, S. M., et al. (2009). "Effects of oral preoperative carbohydrate on early postoperative outcome after thyroidectomy. "Acta Anaesthesiologica Belgica 60(2):67-73	Oral carbohydrate before thyroidectomy improves pre- and postoperative patient comfort, as well as postoperative analgesia, but had no effect on PONV.	200 patients for thyroidectomy, randomized single center trial.
Melis, G.C., et al. (2006). A carbohydrate-rich beverage prior to surgery prevents surgery-induced immunodepression: a randomized, controlled, clinical trial. Journal of parentral & Enteral Nutrition 30(1):21-26	Preoperative intake of a carbohydrate-rich beverage can prevent surgery-induced immunodepression and thus might reduce the risk of infectious complications.	RCT. Human leukocyte antigen (HLA)-DR expression on monocytes before and after surgery was measured.
Soop, M., et al.: Preoperative oral carbohydrate treatment attenuates immediate postoperative insulin resistance. Am J Physiol Endocrinol Metab. 2001, 280: E576-E583	Insulin sensitivity was reduced by 18% in the carbohydrate group compared to 43% in placebo group.	Orthopaedic hip surgery. 15 patients.
Nygren J, et al. (1999). Preoperative oral carbohydrates and postoperative insulin resistance. Clinical nutrition 18(2):117-120	Patients given a carbohydrate drink displayed less reduced insulin sensitivity after surgery compared with fasting.	Orthopaedic surgery. Total hip replacement. 16 patients.
Nygren J, et al.(1998). Preoperative oral carbohydrate administration reduces postoperative insulin resistance. Clin Nutr 17: 65-71	Insulin sensitivity was better maintained in those patients who had a carbohydrate drink compared to those who fasted.	Colorectal surgical patients. 14 patients.

*I acknowledge many of the studies are not adequately blinded which may contribute to observed treatment effects and are prone to bias. I also acknowledge that publication bias is always an issue including in this table. The purpose of this table is to demonstrate that many studies support maltodextrin adminsistration preoperatively including all recent systematic reviews. There is no evidence that demonstrates harm. It seems reasonable to prescribe carbohydrate drinks preoperatively. My impression is there is potential upside and no downside.

**The gold standard for measuring insulin sensitivity is the euglycaemic clamp test. Other forms of testing exist but they are inferior and arguably not suitable for detetecting a difference (Quicki method, HOMA, IVGTT).

FEATURE

REAL WORLD ANAESTHESIA COURSE FRANKSTON, OCT 2016 AND *MEETINGS WITH REMARKABLE MEN* BY GI GURDJIEFF

For those wanting to work in a developing country, channel Bob Geldof and save the planet one general anaesthetic at a time… what's keeping you in your salaried or private practice?

Go now, don't wait, the developing world needs you. See Global Surgery 2030: Evidence and solutions for achieving health, welfare, and economic development[1].

But perhaps, in fact, you might need the developing world?

Meetings with Remarkable Men[2] is the second volume of the All and Everything trilogy written by the Greek-Armenian spiritual teacher GI Gurdjieff.

The Turks and Persians called Georgia 'Gurjistan', which may account for the root of the name 'Gurdjieff.' Autobiographical in nature, Gurdjieff started working on the Russian manuscript in 1927, revising it several times over the coming years[2].

And so began the 25th Real World Anaesthesia Course (RWAC), in Frankston, outer Melbourne in September 2016. Course convenor for the week was Chris Bowden, Director of Anaesthesia at Peninsular Health. Chris had imagined a creative and challenging program for five days and 40 contact hours of teaching, talking and transfer of intellectual property. The 18 participants were not disappointed.

The RWAC course started in the last millennium as the Remote Situations, Difficult Circumstances and Developing Countries Anaesthesia course on an island south of the Australian 'mainland'. Due to the impossibility of the acronym RSDCDCA, Chris Bowden, Phil Blum in Darwin and Wayne Morriss from Christchurch have taken over the running of the only Southern Hemisphere anaesthesia course which seeks to inform, inspire and entertain 'First World' anaesthetists hoping to work, learn and survive in the 'Third and Fourth Worlds'. The course rotates each year, is always oversubscribed and has now been the embarkation point for many scores of Australian and New Zealand anaesthetists who have 'boldly gone where many have gone before'[3].

Gurdjieff's book "takes the form of reminiscences about various 'remarkable men' that he met, beginning with his father. They include the Armenian priest Pogossian; his friend Soloviev, and Prince Lubovedsky, a Russian prince with metaphysical interests"[2].

The RWAC course consists of lectures, workshops, discussion groups and a highly stimulating series of draw-over anaesthetics in the operating theatres, true high fidelity simulation using real equipment, patients and hands on

technology. The didactic material of the course is an ever-changing combination of must know topics and nice to know subjects. Each course is a unique education experience as the course convenors over the years have introduced different lectures and themes, continuing to learn as well as teach in this enormous domain of 'Real World' anaesthesia. Real World because this low resource anaesthesia or lack of it, is the reality for two-thirds of the world.

But perhaps, in fact, you might need the developing world?

The 'pedagogic principle of paramount prescriptive' importance is that the RWAC course does not try to be authorative, rather to encourage discussion and reflection on complex problems. The Four Ps lead to some stimulating sessions where the empirical (go work somewhere) solution for the participants is certainly the best answer.

A fascinating aspect of this year's course was related to equipment. The engineering technowhizzes Robert Neighbour (Diamedica fame), Richard Tully (British Standards Institution) and Steven Threlfo (Newcastle and Pacific equipment guru extraordinaire) were able to answer and anecdotalise ad infinitum. What they couldn't explain simply wasn't worth knowing.

Kenton Biribo, the Senior Lecturer from the Fiji National University, was a delight to listen to. His eloquent Big Picture stuff was amply supported by the realities of doing paediatric anaesthesia in the tropics and being on the receiving end of a couple of disasters (cyclone Winston and Pam).

Gurdjieff, in *Meetings with Remarkable Men*, "weaves their stories into the story of his own travels, and also into an overarching narrative which has them cooperate in locating spiritual texts and/or masters in various lands" (mostly Central Asia). Gurdjieff calls this group the "Seekers of Truth"[2].

"Most of them do in fact find 'truth' in the form of some suitable spiritual destiny. The underlying philosophy, especially as articulated in an appendix, amounts to the assertion that people generally live their lives asleep, are unconscious of themselves and, accordingly, behave like machines subject to outside causes and pressures. Also, one of the chief assessments of the novel is that the people of the past epochs lived in more suitable outer conditions and at higher inner levels than the people today. Many additional hidden harmonies are noted or alluded to"[2].

The RWAC afternoons were also a time of stories and reflections. Robert Neighbour spoke of work in Somaliland, Afghanistan and a myriad of other places just as challenging for an engineer trying to design and support all manner of equipment from CPAP devices for newborns, to anaesthesia workstations to rival Draeger. Justin Burke from the Alfred, reflected on the Fellow and young Consultant experience of finding a work-life balance in Developing Country Anaesthesia. Andrew Fenton, another new Consultant lecturer, shared his 'Going to Zambia' as an undifferentiated anaesthetic registrar with much insight, humour and compassion.

Gurdjieff "claims to have first heard the Epic of Gilgamesh as an oral epic sung from memory by his father; to have made contact with various ancient brotherhoods including the Sarmoung Brotherhood; to have copied a map of 'pre-sand Egypt'; and to have witnessed a number of miracles and esoteric phenomena. There is currently in existence an esoteric group of loosely affiliated individuals who engage in what is called 'The Work', which is the doing part of Gurdjieff's teachings"[2].

Behind the RWAC scenes were all the inevitable usual suspects. Tzung Ding was the indispensible organiser for the week (more or less his role as Deputy Director in Frankston 365/365). The course ran effortlessly and no anguished surgeons cries of submission were to be heard. Lynne and Roma, the department secretaries, seem bent on a career change to Anaesthetic Conference Organisers,

Top down: OMV speed dating, OMV repair session, Phil Blum explains the EMO ether bellows.

FEATURE

Top, anticlockwise: David Pescod dialing the Diamedica machine, Steve Threlfo teaching on the mysteries of the oxygen concentrator, a Goldman's vapouriser, DDOV induction.

as the participants were fed, watered and looked after in their various post-RWAC activity fugue states.

The RWAC is one of three similar courses including Oxford, England's Anaesthesia in Developing Countries and the North American Global Outreach, alternating north and south of the Trump line (next year in Halifax, Nova Scotia).

The Antipodean course this year included 14 'facilitators' with extensive Developing Country experience, including David Pescod Mongolia, Eric Vreede East Timor and Africa, Steve Pickering Nepal, Wayne Morriss PTC EPM and WFSA and Terry Loughnan a peripatetic sojourner in many countries.

It is remarkable to find experience of this depth to share in one room anywhere. The course provides plenty of opportunity for one-on-one conversations. The large numbers of instructors is expressly planned to facilitate this informal learning and exchange of ideas. The RWAC course is not a place for PowerPoints and Talking Heads.

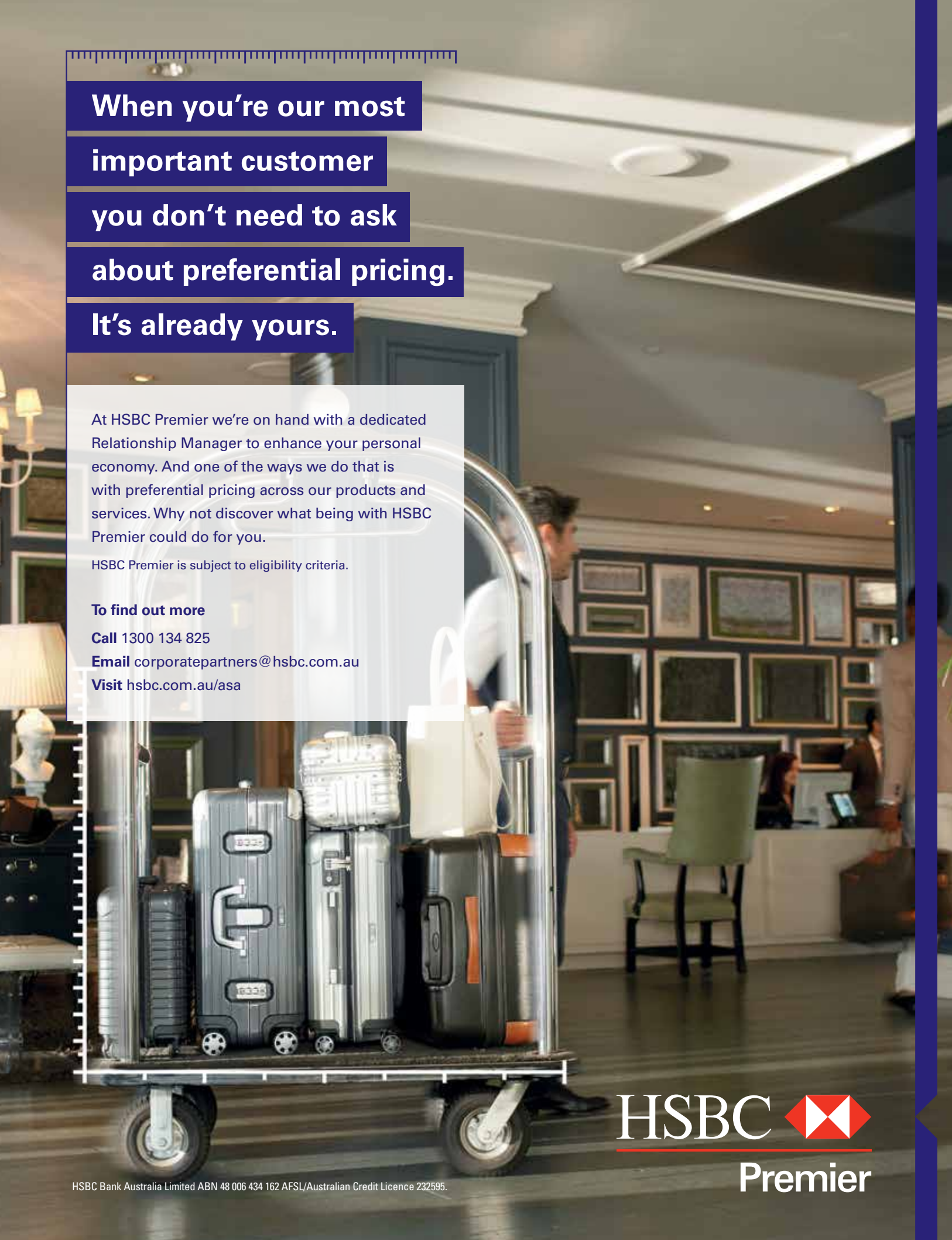
"It may be argued that many of the vignettes in Meetings with Remarkable Men are meant to be symbolic, or teaching stories"[2].

There is plenty of choice when it comes to Developing Country Anaesthesia. Close your eyes and put a pin in a Peters Projection map of the world. You probably wont go far wrong simply going there on the next available flight, even if there are no frequent flyer seats available.

Dr Haydn Perndt
Hobart, TAS

References

1. http://dx.doi.org/10.1016/j.surg.2015.04.011.
2. https://en.wikipedia.org/wiki/Meetings_with_Remarkable_Men.
3. http:// http://www.startrek.com/.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FEATURE

THE 2017 NATIONAL SCIENTIFIC CONGRESS

It has been ten years since the last NSC was held in Perth and the Organising Committee are thrilled to be hosting its timely return. We have a dynamic educational program planned with a focus on bridging the link between science and clinical outcomes. Perth has undergone some extraordinary transformations over the last ten years, and we hope you will come to experience our unique and special city for yourself.

Scientific Co-convenors, Dan Ellyard and Dale Currigan, have put together a cutting edge program. This will begin with pre-congress workshops, including the highly regarded CRASH course for anaesthetists returning to work, and for the first time in Australia – an anaesthetist-led cadaver airway workshop.

Our scientific program will bring together three streams: Bridging Science and Outcomes, a Refresher lecture series and Special Interest Group sessions. These will run concurrently with ANZCA Emergency Response (ER) and non-ER workshops and Small Group Discussions. Our invited speakers have a diverse range of expertise from which they will bridge the many different elements of modern anaesthesia practice.

Looking beyond the academic program, we look forward to sharing the many elements of Perth – some old, some new – that make this city a fantastic place to visit.

The newest addition to the Perth cityscape is Elizabeth Quay. This landmark development was built to reconnect the Swan River and Perth City, and is conveniently located next to the Perth Convention and Exhibition Centre (PCEC), the site of this year's Congress. The Quay's new iconic bridge is the inspiration for the Congress logo and theme – 'Bridging the Elements'.

The site of the previous Congress, the Burswood Entertainment Complex, has been rebranded as Crown Perth. Located less than 15 minutes from PCEC, it now has the hotels, restaurants, bars and entertainment synonymous with the Crown brand – a perfect location for down time during the Congress.

The sunny and beautiful springtime weather makes for great outdoor sports and adventure opportunities. There will be a golf day, morning bike ride and fun run as well as water sports along Swan River or at the many beaches along Perth.

The Swan Valley is only 40 minutes away from the city centre, with its many world famous wineries. A bit further afield, Margaret River is WA's premier wine region and a stunning place to visit for its beautiful beaches, karri forests, local produce and restaurants.

For those of you who are coming with family, the options for entertainment are endless. At Hillary's Boat Harbour you can swim with the sharks at AQWA, have fun by Stillwater beach or catch a ferry to Rottnest Island. Wander around the quirky Fremantle markets, enjoy the play areas in the iconic Kings Park, relax either by the beach in Cottesloe or by the river at Matilda Bay.

Our social program will open with a Welcome Reception on Friday evening, a lovely opportunity to meet colleagues, old and new; and an Exhibitors function on Saturday evening allows you to mingle with our sponsors in a relaxed setting. The Gala Dinner will be held on Sunday night to allow weekend delegates to join in, and with our theme 'A Song of Fire and Ice', it is sure to be a memorable night of entertainment! Finally, a 'Night in the Park' on Monday evening at the State Reception Centre (Fraser's) in Kings Park offers attendees the chance to experience the wild flowers in full bloom and the breathtaking views of the Swan River and Elizabeth Quay.

We have worked hard to make this Congress as inclusive to all our delegates as possible. As such, I am very pleased that, for the very first time in an Australian Anaesthetic Congress, there will be a parents' room with live streaming of the sessions for delegates with babies and toddlers. There will also be a paid childcare program for older children available – please indicate your interest when you register for the Congress. Our delegates' partners are also catered for with a comprehensive partners' program in the registration brochure. These activities will be expanded and updated on the website www.asa2017.com.au where you will also find our personal, local recommendations on eating out and entertainment in Perth.

We look forward to hosting you all in Perth at the 76th ASA National Scientific Congress.

Perth/WA – things to do

PICK FROM WA'S PLETHORA OF PRODUCE

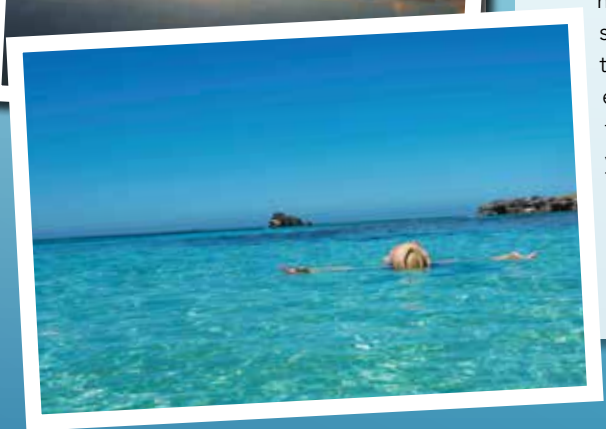
WA is one of the world's most biologically diverse regions, and as such, there is a profusion of produce to choose from, sourced from a range of areas and influences. Home to nine glorious wine regions with their own individual properties and qualities, a visit to WA will ensure you're not left wanting. Book in a tasting tour of the cellar doors, or take up the opportunity to combine the region's produce with a glass or two of perfectly paired vino. Perth, in particular, almost overwhelms visitors with the number of restaurants on offer (more per capita than any other capital city in Australia). Fine dining not your thing? The city's bar scene is as varied as their drinks lists, offering colonial hotels, country pubs or sophisticated European small bars nestled amongst the city's lanes and alleyways.

SURF, SUN AND SERENITY

WA is known for its extensive stretches of coast, boasting some of the whitest Australian beaches and clearest seas as well as many islands and archipelagos to explore – if you know where to go!

If you're thinking of sticking to Perth, fear not! There are still 19 incredible beaches to choose from, including the iconic Cottesloe Beach. Keen to stretch your boundaries? Head to the far north and you'll find Cable Beach hosting its famous Indian Ocean sunsets, and if you'd rather make your way south, you may just be blinded by Australia's whitest beach – Lucky Bay. Our advice? Make friends with a local and see if they'll show you their favourite spot!

With beaches comes the ocean and WA is happy to help you explore. There are some fantastic stretches of water to snorkel in, or take a glass bottomed boat trip and watch a whole other world under your feet.



CHOOSE YOUR OWN ADVENTURE

Fun fact: the WA outback is the largest in the country, and we're a big, 2-billion-year-old country. Pick a direction (grab a guide) and explore countless versions of our stunning land. Like the WA coast line, heading inland offers an incredibly diverse range of other-worldly landscapes and adventures to choose from. Visit some of the world's most impressive rock formations from the Pinnacles to the Bungle Bungle range; or head north for a true outback adventure and follow the legendary Gibb River Road through the country, experiencing country hospitality at homestead and outback stations. Looking for some history with your adventure? Make your way east and visit the gold rush hub of Kalgoorlie and learn how Australia did the Wild West. Wherever you go, keep your eyes peeled for the myriad of native animals co-habiting with the locals.

COME FOR THE CULTURE

Above all else, make Perth your holiday destination, if only to see why it is regularly ranked in the top 10 most liveable cities. With premium wine regions, endless stretches of untouched beaches and Indian Ocean sunsets, we know once you visit, it'll be hard to go home. So, while you're here – why not exercise those cerebral muscles, and discover the stories, secrets and traditions of one of the oldest surviving cultures on earth by booking an indigenous tour. Rest and relax by treating yourself to some luxury, and soak in the diversity Perth has to offer by stepping into the art and live performance scene scattered amongst the city.

2017 AWARDS, PRIZES & RESEARCH GRANTS

PRE-NSC ADJUDICATED

ASA PhD Support Grant

Description
Applicants submit a proposal to carry out research to advance the safety, delivery or efficacy of anaesthesia while having a favourable impact on society as a whole.

Eligibility
Applicants must be a member of the ASA.

Award and Applications
The grant comprises a certificate and financial support up to $10,000 per recipient (the grant may be used to purchase or lease equipment, facilities or material; fund administrative or scientific support; offset research and other expenses; or fund travel and accommodation).
Up to two grants may be awarded annually.
Applications close 30 June, 2017. To apply, visit http://bit.ly/APRG2017.

Kevin McCaul Prize

Description
Applicants submit a written paper, critical review or essay on any aspect of anaesthesia, pain relief, physiology or pharmacology, with particular reference to the female reproductive system.

Eligibility
ASA members who are registrars in training or junior specialists within two years of obtaining a higher qualification in anaesthesia.

Award and Applications
The prize comprises a certificate and monies of $10,000.
Applications close 30 June, 2017. To apply, visit http://bit.ly/APRG2017.

Jackson Rees Research Grant

Description
Applicants should submit a proposal outlining how the grant will assist in research projects in anaesthesia or related disciplines such as resuscitation, intensive care or pain medicine. Recipients will provide an annual progress report of the research project and will make a final report as a presentation during the scientific program of the subsequent NSC.

Eligibility
Applicants must be a member of the ASA.

Award and Applications
The prize comprises a certificate and monies of $25,000.
Applications close 30 June, 2017. To apply, visit http://bit.ly/APRG2017.

PRE-NSC ADJUDICATED CONTINUED

Jeanne Collison Prize

Description

The Jeanne Collison Prize is awarded for the outstanding research in the fields of anaesthesia and pain management and recognises excellence in original research within Australia in these fields. Applicants should submit a proposal outlining plans for original research within Australia in the fields of anaesthesia and pain management.

Eligibility

Applicants must be an ASA member with an interest in, or sub-specialising in, pain management or intending to enter this sub-specialty.

Award and Applications

The prize comprises a certificate and monies of $10,000.
Applications close 30 June, 2017. To apply, visit http://bit.ly/APRG2017.

NSC PRESENTATION AWARDS

Gilbert Troup ASA Prize

Description

The Gilbert Troup ASA Prize commemorates the contribution to Australian anaesthesia by Dr Gilbert Troup of Perth, Western Australia. Dr Troup was the second President of the ASA from 1939–1946. Established in 1956 and first awarded in 1957, the Registrar's Essay Prize (later renamed the Gilbert Troup Award) is the ASA's oldest award – only Honorary Membership existed as an honour before it. The name was changed to the 'Gilbert Troup ASA Prize' in 1963, due to the pre-existence of a Gilbert Troup Prize in Western Australia. The Prize was subsequently incorporated into the NSC presentations in 2012 as a formal oral presentation.

Eligibility

Application is open to ASA members only. The presenter must be one of the authors of the abstract and an ASA member. The abstract must be based on original research, the majority of which has been performed in Australia. The principal content of the abstract must not have previously been presented at a national meeting in Australia or New Zealand. An individual may only submit one abstract for this prize category. A research group is eligible to submit more than one paper for consideration for the Gilbert Troup ASA Prize, but both the first author and the presenter for each accepted paper must be different.

Award and Applications

The prize includes a medal, known as the Gilbert Troup Medal and cash prize of $7,500. The author(s) will be invited to submit the prize-winning abstract to *Anaesthesia and Intensive Care*, the journal of the ASA, for assessment for publication.
Applications close 17 May, 2017. To apply, visit http://bit.ly/2jPeylz

NSC PRESENTATION AWARDS

Trainee Member Group Best Poster Prize

Description

The ASA Trainee Member Group (TMG) Poster Prize was introduced in 2011 and is only open to ASA TMG members who present their research as a poster at the NSC.

Eligibility

All trainees presenting a poster in this category must be a TMG member. Posters submitted must be based on original research in the fields of Anaesthesia, Intensive Care and Pain Medicine. The principal content of the poster must not have previously been presented at a national meeting in Australia or New Zealand. Inclusion for consideration of the ASA TMG Poster Prize does not preclude the applicant from also being eligible for one of the three ASA Best Poster Prizes.

Award and Applications

The prize consists of a certificate and $500. Applications close 17 May, 2017. To apply, visit http://bit.ly/2jPeylz

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ASA Best Poster Prize

Description

The ASA Best Poster Prize is open to ASA members who present their research as a poster at the NSC.

Eligibility

The investigator must be working in the fields of Anaesthesia, Intensive Care and Pain Medicine. The principal content of the abstract must not have previously been presented at a national meeting in Australia or New Zealand. The presenter must be one of the authors and an ASA member. An individual will only have one abstract accepted for this prize category. A research group is eligible to submit more than one abstract for consideration, but both the first author and presenter for each accepted abstract must be different. The total number of abstracts accepted for consideration for the ASA Best Poster Prize is not restricted and will be determined by the NSC Scientific Committee according to the quality of the applications

Award and Applications

The ASA fund awards three prizes at each NSC to the value of $4,000, $2,500 and $1,500 respectively for recipients judged first, second and third by the adjudicating panel together with a certificate. Applications close 17 May, 2017. To apply, visit http://bit.ly/2jPeylz.

NON-NSC PRESENTATION AWARDS

Rupert Hornabrook Day Care Special Interest Group Prize

Description

Rupert Hornabrook was a pioneer of anaesthesia in Australia, devoting the bulk of his practice in the years following the Boer War to promoting the specialty. He was honorary consultant in anaesthesia to the Melbourne General Hospital for many years and published extensively on issues of safety in anaesthesia. He was an early advocate of improved cardiovascular monitoring and was influential in popularising ethyl chloride-ether as an alternative to chloroform. This award in his name recognises his contribution to Australasian anaesthesia. Researchers are invited to present an oral presentation at the NSC in Perth.

Eligibility

Applicants must be a member of the Day Care Special Interest Group.

Award and Applications

Presentations will be judged by the Day Care SIG executive on the basis of scientific content, relevance and standard of presentation. The Hornabrook prize attracts a medical book voucher to the value of $1,000. For further information regarding the prize and how to apply, please email asa@asa.org.au. Applications close 30 June, 2017. To apply, visit http://bit.ly/APRG2017.

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SAVE TAX THROUGH SUCCESSFUL LOAN STRUCTURING

How you structure your loans can have a big impact on the tax you pay, your risk, your ability to build wealth, your cash flow and your general financial strength. In this issue of *Finance News*, Stuart Wemyss from ProSolution examines how best to structure loans so as to maximise money efficiency.

Efficient loan structuring is a commonly overlooked and rarely understood topic, but that's not to say it's overly complex. Like anything, you don't know what you don't know until you know it. Many people tend to carry a reasonable amount of (investment) debt throughout their working life so it's especially important for you to ensure your mortgages are your servant, not your master.

When looking to invest, its always good to have some common strategies you can employ to ensure you are getting the best deal out of the situation. Consider it a sort of checklist to see if you are optimising your loan structure. But a word of warning – this article obviously does not take into account your individual circumstances so please seek professional credit and/or tax advice before making any changes to your loans.

ALWAYS BORROW THE MAXIMUM AND USE AN OFFSET

The first thing to be very mindful of is that you typically only have one opportunity to crystallise the maximum tax deductible loan in respect to a property – that is, when you first purchase it. You cannot contribute cash and borrow a lower amount when you purchase a property and then subsequently increase the loan later on (as the purpose/use of the additional funds will determine whether the loans are tax deductible or not). The second thing to keep in mind is that time and time again it is demonstrated to me (through dealing with hundreds of medico clients) that there is one thing that doesn't change in life and that is change itself. Therefore, you will do yourself a great service to structure your finances to give you as much flexibility as possible.

Let me explain using an example; Dr Smith purchases an investment property for $500,000. He has repaid his home loan and has no other debt. He has $190,000 of cash savings to contribute to the investment. He has two options (ignoring costs for this example): he can borrow what he needs being $310,000 ($500k less $190k cash) or he can borrow $500,000 and deposit $190,000 in a linked offset account. The latter option won't cost him any more as the bank will only charge interest on the net balance of $310,000. However, Dr Smith can still access the $190,000 cash savings at any time. For example, if a few years after purchasing the property Dr Smith decides to undertake some renovations to his home costing approximately $100,000, he can withdraw this amount from the offset. Of course, because the balance in the offset has reduced, his interest bill will increase but all the interest will be tax deductible. If he hadn't have structured his loan with an offset, he would have had to borrow the $100,000 for the renovations and the interest on that loan would have not been tax deductible. In summary, it is nearly always the best approach to borrow the full cost of a property and deposit cash in the offset.

ALWAYS INTEREST ONLY

In keeping with the previous sub-heading, this tip also relates to preserving future tax benefits and maximising your flexibility. Structuring your loan repayments as interest only (and not principal and interest) provides the following benefits:

- It allows you to accumulate all surplus cash in the offset instead of reduce the loan principal. That is, it preserves the loan principal at its original value which might be important for future tax benefits (similar to the above strategy – "always borrow the maximum and use an offset"). This might even be appropriate for your home loan as your home may become an investment property one day.
- It reduces your financial commitment to the lowest level. The benefit of this is twofold. Firstly, it minimises your risk in case of a change of circumstances such as a temporary reduction in

income. Secondly, it allows you to direct your surplus cash flow as you see fit from time-to-time. For example, an investment opportunity might arise that necessitates you to only pay interest only on your home loan for a few months.

MINIMISE SECURITY

Be careful to not give the bank too much security. A property's title is better held in your possession than the banks. The rule of thumb is to try and keep your loan to value ratio at or around the 80% of the securities value. This will still allow you to get the lowest rate, whilst not giving the bank any more security than they need.

A common example of 'giving the bank too much security' is where a client might have a small home loan for say $200,000. The client then purchases an investment property for $550,000 and borrows $580,000 to fund this purchase (i.e. including stamp duties). The bank will often hold the client's home and the new investment property as security. However, if the client's home is worth more than $900,000 (which is often the case), the bank doesn't need to take the new investment property as security. The home in itself will provide plenty of security for the home and investment loan.

The advantages of holding onto the title are that you can take a clear title to another lender to get a new loan and your existing lender does not need to know anything about it. Also, when it comes to selling a property without a mortgage (i.e. clear title), it is an easier process and you have full control over how to use the sale funds (whereas, if the bank holds the title they can force you to use all the funds to repay debt).

DIVERSIFY LENDERS

Putting all your eggs in one basket is rarely a prudent thing to do in many (all) things in life including dealing with banks. There are many advantages with diversifying lenders including:

- Sometimes a lender knows too much about you and therefore has too much control over your personal, business and investments. Banks are good servants but bad masters.
- It is possible to better manage (maximise) your borrowing capacity by using multiple lenders – of course it's still important to borrow within your safe limits.
- Banks are less like to get 'lazy' if they know they don't have all of your business. It keeps them on their toes and prevents them from becoming complacent.
- Bank property valuations commonly vary significantly from one bank to the next. Having a relationship with two or more banks (or better still, a mortgage broker) will allow you to maximise your borrowable equity (i.e. how much you can borrow against a property).
- Fixed rate – you have more than one lender to choose from without needing to refinance.

AVOID CROSS-SECURITISATION

Cross-securitisation is where any one loan uses more than one property as security. A simple example of cross-securitisation is where you have an investment loan secured by two properties: your home and the investment property. Here are the top three reason why you must avoid cross-securitisation:

- Does not allow you to maximise borrowable equity (i.e. lack of control over valuations) – It is not by chance that this is my first point as maximising your borrowable equity is critically important as the sooner you invest, the more money you make over time (because of compounding capital growth). If you avoid cross-securitisation you can determine which properties to revalue and when. It is likely that it won't make sense to revalue all your properties at the same time (as the amount and quality of recent sales of comparable properties often determines if it's advantageous to revalue a property or not. If there are not many comparable sales, try and defer any bank valuations). If your loans are cross-securitised, the bank will want to revalue all the properties that secure your mortgages – not just the ones you want to revalue. Consequently, you might get a mixture of higher and lower valuations which may negatively impact on your overall borrowable

Finance highlights

- *Usually there's only one chance to maximise tax deductible loans when buying a property.*
- *The one thing that doesn't change in life is change itself – structure in flexibility.*
- *Structure your loan payments as interest only.*
- *Don't give the bank too much security.*
- *Divide your eggs, don't put them all in one basket.*
- *Cross-securitisation limits your control over valuations, reduces your flexibility with lenders and removes control over sales proceeds.*
- *Consider personalised advice.*
- *There is such a thing as holding a healthy level of good debt.*
- *You don't know what you don't know until you know it.*

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equity (as the lower valuations might more than offset the value of the higher valuations).

- Tying you to particular lender and reducing your flexibility – If all your mortgages are cross-secured your banking can become very entangled and it may prevent you (or make it very costly/difficult) to take one property away from your existing bank to get a better deal. You may want to use a new lender because, for example, it's offering a special (fixed) rate or perhaps it has a higher borrowing capacity and you have fully utilised your existing banks borrowing capacity. However, you may not want to refinance your whole portfolio. Having all your properties separately secured gives you more flexibility as you might be able to refinance one property to the new lender. This will probably help you maximise your borrowing capacity too (borrowable equity).
- No control over sales proceeds – If your mortgages are cross-secured, the bank can control any and all sales funds (if you sell a property) and force you to contribute it to repaying debts. However, if there is no cross-securitisation, the bank can only demand repayment of the mortgages secured by that property only. It is then up to you what you do with the balance. This is important as you might be selling property to realise cash reserves and allowing the bank full control over your money negates the benefit of selling in the first place. This is an important risk management point as many investors rely on the assumption that if things go pear-shaped, they can sell and walk away with cash. This might not be possible if you are cross-securitised.

STRUCTURES THAT HELP YOU REPAY YOUR HOME LOAN SOONER

Anaesthetists that have larger home loans (non-tax deductible debt) may benefit from personalised advice, as there are certain structures that may allow you to repay your home loan a lot sooner. These structures could end up saving you a lot of money in tax and interest. This is often a concern or priority for people, i.e. they prefer to repay their home loan before they begin investing. The good news is that you may be able to do both in a safe and secure manner. However, it is very important that you seek professional advice to ensure that you comply with the relevant tax laws.

STAGGER FIXED RATE EXPIRY

Most investors will be long-term borrowers. They will typically have mortgages for most of their lives, such as investment mortgages. In fact, it's good to come to terms with this – i.e. its important (efficient) to hold a healthy level of good debt (tax deductible debt) for most of your lifetime. As such, it makes sense from time-to-time to fix mortgage interest rates. It is good interest rate management to stagger the expiry of fixed rates. For example, it might make more sense to have some of your mortgages on a variable rate, some fixed for three years and some fixed for five years. This gives you more flexibility to review your interest rate management (i.e. fixed versus variable) at regular intervals.

GET ADVICE

It is impossible to make this article an exhaustive list of loan structuring tips and strategies but hopefully it gives you a taste of what we consider when working with clients. The upshot of it is; you don't know what you don't know until you know it. Therefore, like with many financial matters, it makes sense to obtain professional credit advice from an experienced mortgage broker when establishing your loans. Interest rate and fees are important to consider, but often optimising the loan structure can add a lot more value.

For more information, please contact:

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Stuart Wemyss is an independent and licenced chartered accountant, financial planner and mortgage broker with over 18 years' experience in financial services. He founded ProSolution Private Clients in 2002.

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WEBAIRS NEWS

An overview of the first 4,000 incidents reported to webAIRS has been published in the January 2017 edition of *Anaesthesia and Intensive Care*.

This reporting milestone was achieved in July 2016 and shows that the most common incidents reported were coded as Respiratory, followed by Medication, Cardiovascular, and Medical Device/ Equipment. These four main categories accounted for over 70% of the incidents reported. The outcomes data showed that no harm occurred in 70% of the incidents, while 26% and 4% resulted in harm or death, respectively. Whilst the no harm category accounted for the majority of incidents, it is extremely important to report these low harm incidents. Analysis of them can assist in developing strategies to prevent the less common, serious harm events or deaths[1].

A further series of articles are planned for this year with themes including awareness, aspiration, airway, anaphylaxis, hypotension and medications. A preview of the anaphylaxis data will be presented at the ANZCA ASM in Brisbane in May 2017.

INCIDENT REPORTS

As of 18 January 2017, webAIRS has collected 4,580 incident reports from 144 registered sites, which represents considerable growth since the milestone of July 2016. If you haven't already registered with webAIRS, you can do so quickly and easily from the link on the site landing page (www.webAIRS.net) Frequent reporting is an important component in the process of quality improvement in our practise.

M.Culwick, S.Walker and N.Gibbs.

Reference

1. A cross-sectional overview of the first 4,000 incidents reported to webAIRS, a de-identified web-based anaesthesia incident reporting system in Australia and New Zealand. NM Gibbs, M Culwick, AF Merry. January 2017. *Anaesthesia and Intensive Care*, Vol 45:1, pp.28-35.

For more information, please contact:

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Administration support: anztadc@anzca.edu.au

To register, visit www.anztadc.net and click the registration link on the top right-hand side.

A demo can be viewed at: http://www.anztadc.net/Demo/IncidentTabbed.aspx.

FOR THOSE WHO DARE TO STEP FORWARD

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INSIDE YOUR SOCIETY

POLICY UPDATE

ASA Policy Manager, Chesney O'Donnell, and Policy Officer, Elaine Tieu, give an overview of the trends in anaesthesia billing practice and the Australian healthcare sector on a broader level.

INTRODUCTION TO ASA POLICY QUERIES

In 2016, the Policy team received 211 queries from our membership. Over 180 queries were related to economic and financial aspects of anaesthesia practice, and as such were handled by EAC. The remaining queries were related to professional aspects, including clinical practice and standards, position statements, broad industrial disputes, credentialing and other related issues, and these were dealt by PIAC. Due to the complexity of these queries, the resolutions tend to be open-ended and require a relatively longer time to conclude. With the reactivation of the Public Practice Advisory Committee (PPAC) late last year, members working primarily in the public sector will find support when addressing issues such as current awards and conditions for staff specialists and VMOs applicable in each state and territory as well as other public practice related issues.

The majority of queries handled by EAC last year were primarily related to the *Relative Value Guide*. The following is a selection of the frequently asked queries over the past year, with generic recommendations members can look to before submitting an official query with the Policy team.

After-hours and emergencies attendance

The Medicare system has numerous consultation and attendance items, from various sections of the MBS, as such this can cause difficulty in deciding which item is appropriate. The ASA system of purely time-based attendance items (CA002 to CA008) (Table 1) is much simpler, but unfortunately our items do not have exact MBS equivalents. Therefore, this is a frequent source of queries from ASA members. As members will probably have noted, consultation and attendance services are not well rebated by Medicare compared to procedural items, especially in emergency scenarios.

The ASA defines 'after-hours' as before 8am and after 6pm on weekdays and anytime on weekends or public holidays. Attendances during after-hours can be claimed with CA051.

There are two MBS items which can be used to cover after-hours attendances depending on the time of attendance. The MBS after-hours consultation clock in Figure 1 details the days and times MBS items 598 and 600 can be utilised. If the attendance was not in the time periods covered by 598 and 600, and was less than an hour in duration, the applicable item is from the range 17640 to 17655 (Table 1).

Life threatening emergency situations are categorised under ASA item CA060, with the addition of a RVG time item. The MBS has a series of time-based items for

Table 1: ASA and MBS item numbers for attendance and consultations.

Time (minutes)	ASA RVG		MBS		
	Item	Units	Pre-anaesthesia	Referred consultations	Fee
≤15	CA002	2	17610	17640	$43.00
16-30	CA004	4	17615	17645	$85.55
31-45	CA006	6	17620	17650	$118.50
>45	CA008	8	17625	17655	$150.90

The ASA items apply to all anaesthesia consultations, based on duration. There are specific MBS items for pre-anaesthesia and referred consultations. The latter includes postoperative and other consultations applicable for specialist anaesthetists.

Table 2: MBS items for emergency attendances.

Time (hours)	MBS	
	Item	Fee
1-2	160	$221.50
2-3	161	$369.15
3-4	162	$516.65
4-5	163	$664.55
>5	164	$738.40

Each item is applied on a duration basis to include all of the time until complete handover of care of the patient has occurred.

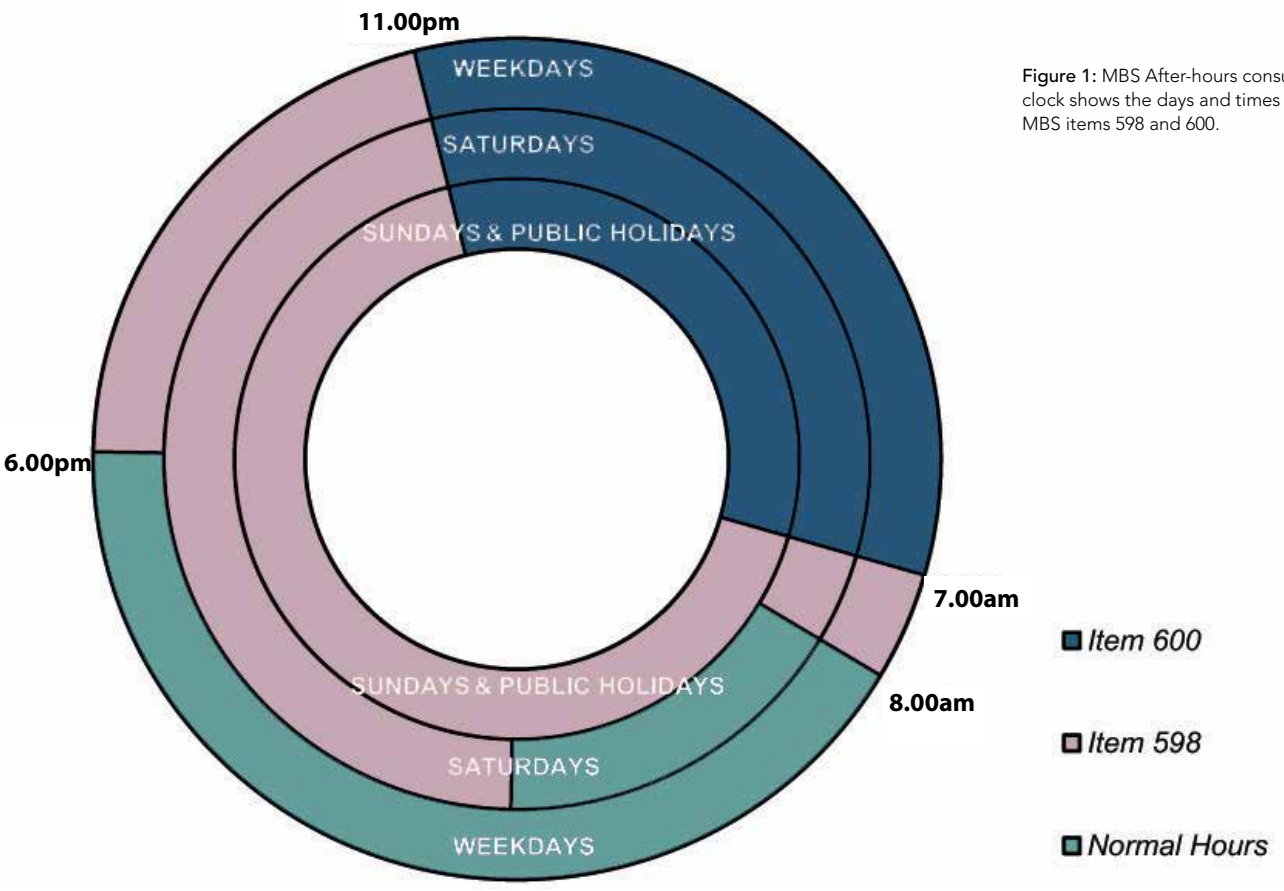

Figure 1: MBS After-hours consultation clock shows the days and times covered by MBS items 598 and 600.

life threatening emergencies, items 160 to 164 (Table 2). These require a minimum of one hours' attendance of the patient. These items apply to the services of all doctors who may be involved in the care of the patient, not just one. Should one doctor's attendance not be continuous for some reason, the items can still apply; it is the total time in attendance which decides which item applies. If certain therapeutic or diagnostic procedures are performed (e.g. airway interventions, invasive cardiovascular monitoring, blood transfusion), additional items may apply.

Anaesthesia for epidurals and caesareans

When an anaesthetist is called in to provide epidural analgesia for a patient in labour, the pre-epidural consultation would be usually covered by MBS item 17680. Depending on the time of day, items 598 or 600 are an alternative. The epidural itself is covered by items 18216/18219 (in-hours) or 18226/18227 (after-hours) (Table 3). Anaesthesia for caesarean section is covered by item 20850. Depending on the circumstances, the pre-anaesthesia consultation may be covered by items in the range 17610-17625, or in emergency situations by items 598/600 (depending on the time of day). It must be noted that items 17610 to 17625 all have complexity aspects to their descriptors, and do not depend just on the time taken.

The regional anaesthetic technique itself does not attract Medicare benefits – item 20850 covers the anaesthetic service, regardless of the technique used. However, if agents are administered epidurally/intrathecally in order to provide postoperative analgesia, separate Medicare items do apply. If the anaesthetist providing the service for the caesarean itself performs the epidural/intrathecal injection procedure, item 22031 applies. If the patient has a pre-existing catheter in situ, and agents are administered via this catheter for the purposes of postoperative analgesia, item 22036 applies. Items 22031 and 22036 cannot be used together for the same case, in any circumstances. Items 22031 and 22036 can of course be applied to operations other than caesarean section, wherever epidural/intrathecal agents are administered for postoperative analgesia.

The application of item 25025 in such situations (anaesthesia for after-hours

INSIDE YOUR SOCIETY

Table 3: MBS items for epidurals, caesarean and emergency anaesthetic services.

MBS Item	Description	Fee or Units
17680	Pre-epidural consultation - consultations prior to regional blockade in a patient in labour	$85.55
18216	Intrathecal or epidural injection (initial or start of infusion) of a therapeutic substance – up to 1 hour of attendance	$189.90
18219	– where continuous attendance by the medical practitioner extends beyond the first hour	$189.90 plus $19.00 per 15 minutes after 1 hour
18226	Intrathecal or epidural injection (initial or start of infusion) of a therapeutic substance (after-hours) – up to 1 hour of attendance	$284.80
18227	– where continuous attendance by the medical practitioner extends beyond the first hour	$284.80 plus $28.60 per 15 minutes after 1 hour
18222	Subsequent injection (or revision of infusion) of a therapeutic substance to maintain regional anaesthesia or analgesia – where the period of continuous medical practitioner attendance is 15 minutes or less	$37.65
18225	- where the attendance is more than 15 minutes	$50.05
22031	Epidural/intrathecal injection (initial) of a therapeutic substance/s, with or without insertion of a catheter, in association with anaesthesia and surgery, for postoperative pain management	5 units
22036	Epidural/intrathecal injection (subsequent) of a therapeutic substance/s, using an in situ catheter, in association with anaesthesia and surgery, for postoperative pain management	3 units
25025	After-hours emergency	50%

emergencies) is also a frequent source of queries. It is essential to note that this item, which provides a 50% loading on the RVG unit allocation, only applies where the patient requires immediate surgery, without which there would be a threat to life or body part. It does not automatically apply just because a procedure is performed in the after-hours period.

The ASA also receives frequent queries relating to separate attendances for local anaesthetic 'top ups', for patients with an indwelling nerve block catheter (peripheral or neuraxial). Here, items 18222 or 18225 may apply (the latter if the service takes longer than 15 minutes). An attendance item from the range 17640 to 17655 may apply, provided a formal consultation with the patient actually occurs, prior to the 'top up'.

Numerous member queries arise when the Medicare Eclipse system rejects billing claims for the one patient whom required an initial epidural and a caesarean on the same day. This can be resolved by manually completing separate accounts. The second account should have the patient notes attached to demonstrate that the service was a separate clinically relevant service, provided on the same day. Sending separate accounts is also recommended when the anaesthetist provides the anaesthetic for the surgery, and at a separate time, attends on the patient to perform a 'top up'. Unfortunately, members have experienced many months' delay for payment to be processed.

As every patient scenario is different, and if members are uncertain about the correct application of any such MBS or ASA RVG items, please do not hesitate to contact the ASA Policy team.

With thanks to Dr Mark Sinclair (Chair of EAC) for his expert advice on MBS and ASA RVG item numbers.

AUSTRALIAN HEALTHCARE TRENDS 2016–2017

There have been several attempts at indicating trends in the Australian healthcare system. Not all have been holistic in their analysis. Many haven't taken into consideration the issues that deal with maldistribution in great depth. In the following section, we will examine research conducted by organisations like the Business Council of Australia (BCA) and PricewaterhouseCoopers (PWC) which provides an interesting overview, but lacks the minutia and insight when associated with delineating the finer shifts within medical specialties based upon geography and population, as well as supply and demand.

The BCA is an industry association comprising of chief executives from more than 100 of Australia's biggest corporations. BCA identified four 'megatrends' in Australian healthcare for 2016. These were: 1) 'Growing financial

imperative to improve productivity', 2) Increasing ageing and disease prevalence, 3) Digital health and the new consumer and 4) Precision medicine and personalised care.

Many countries struggle with financing public healthcare expenditure which could end up representing 70% to 85% of the total healthcare expenditure. This issue is prevalent in two-thirds of OECD countries[1]. With the decrease in consumer disposable income it has placed greater pressure on the public sector. Policy-makers can effectively take two approaches per BCA's observations to tackle these problems:

1. Do Less – effectively rein in the costs by rationing access to care.

Or

2. Pay More – financed healthcare via additional tax revenue.

One of the biggest impacts to the Australian economy has been key commodity prices like iron ore which has tumbled over 50% since 2013[2]. Australia's nominal GDP growth was 1.8% in 2014/15, the lowest since 1961/62[3]. What will compound this even more is that Australia "faces its worst cumulative deficit in 60 years"[4]. The projection is that it will exceed 24% of GDP by 2018/19. Net debt increased from 3% of GDP in 2010 to over 15% in 2015. Personal disposable income has fallen for four quarters in a row, with the debt to income ratios having tripled to 152% since the 1990s[5]. The fastest growing segment of government health expenditure for the past decade has been hospital related spending.

PWC complements several of these viewpoints by stating that, while the longer life expectancy experienced in Australia is based upon our "excellent healthcare system", this inevitably comes at a cost[6]. The ageing Australian population is a major theme in PWC's research and that maintaining a world-class healthcare system has been met with pessimism and spending viewed "as fiscally unsustainable". PWC proposes an alternative view by focusing on the healthcare sector as one of Australia's "largest providers of employment, and the fifth largest contributor to Australia's GDP"[7]. More recently, this fact was supported by the Commonwealth Bank of Australia, which showed that Australian jobs by sector had health in first place, leading retail and sitting at around 13%, inclusive of full- and part-time employment[8]. The MBS review appears to be supported in principle by PWC, with the notion that "a third of treatments that can be partially or fully funded by Medicare are unnecessary or even harmful", and that a major overhaul is needed to contain costs[9].

Like BCA there isn't much discussion regarding specialists in PWC's evaluation. As a final thought on the matter, a more telling insight has been provided by the Australian Institute of Health and Welfare report, released in August 2016, which shows that the rate of GPs has remained steady at 114 per 100,000 people[10], while the number of registered medical practitioners overall has increased by 3.4%[11]. With GPs contained in the highest proportion of doctors aged over 55 years old (27.2%), this figure indicates a "disconnect" between specialties and the potential risks of oversupply with certain specialties. This is in itself a 'trend' worth keeping a close eye on.

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INSIDE YOUR SOCIETY

ECONOMICS ADVISORY COMMITTEE

MEDICARE BENEFITS SCHEDULE (MBS) REVIEW

The Anaesthesia Clinical Committee (ACC) is reviewing the MBS items for anaesthesia and has now met on several occasions. ASA Member Dr Jim Bradley has a seat on the ACC. It is important to note that he has been appointed in his individual capacity, not as a representative of the ASA. (Dr Bradley is currently the ASA Specialty Affairs Advisor, and is a Past ASA President).

As members are aware, the ASA and ANZCA Presidents met personally with Prof. Robinson and ACC Chair, Dr Jo Sutherland, in late October. Prof Robinson appeared concerned about out-of-pocket costs for medical services, and there was discussion of the therapeutic and diagnostic MBS items relevant to anaesthesia. The strengths of the RVG, including its ability to accurately match rebates to the actual service provided and its future-proof nature, were emphasised. However, it was clear that certain changes could be in the wind and, if implemented, these could significantly decrease the funding for anaesthesia services.

From examining the published information on the make-up of the ACC, It is clear that, while most ACC members have a high level of expertise in the field of clinical anaesthesia, their knowledge and understanding of the RVG system and its history and background may be lacking. For example, five of the twelve ACC members are not anaesthetists (three are surgeons, with one GP and a consumer representative).

The appointment process for inclusion on this committee is opaque. Unfortunately, despite all EAC members expressing a willingness to be involved in the MBS review process, and being formally nominated, not one has been appointed to any of the review committees, including the ACC. ASA office bearers from other backgrounds (eg PIAC and the ASA Council) have also been willing to be nominated. It is surprising that there are three surgeons involved in the review of anaesthesia, but that at this stage, no anaesthetist has been appointed to any of the surgical/procedural review committees. This is despite the fact that the MBS Review Taskforce has stated from the outset that the review committees are not only open to practitioners from the specific specialty under review, but also to practitioners from allied specialties.

The EAC knows the RVG system intimately, and has extensive experience in dealing with the Department of Health, the Department of Human Services, the relevant Ministers and Shadow Ministers, as well as other important government bodies such as MSAC and the ACCC. The knowledge and experience we have gained would have been most useful to the ACC, but unfortunately this appears to have been overlooked. Recommendations are likely to be made, possibly without the benefit of this information.

It is important to note that there is no justification for concern or cuts by the Department of Health or the federal government to the current overall level of Medicare funding for anaesthesia. The MBS Review Taskforce's own figures show that Medicare expenditure on anaesthesia is only 23% of that on surgical items. Australian taxpayers already receive excellent value for money, considering the world-class quality of our services and our equal and often greater responsibility for safe patient outcomes, compared to the much higher funded surgical specialties.

It must be acknowledged that the MBS Review Taskforce has not been officially instructed to cut costs, nor has any cost saving target been identified or aimed for. Nevertheless, while cost savings may not be the official aim of the process, there is no question that savings are expected. Comments from the former Minister for Health, Sussan Ley, who set up the MBS review process, confirm this. The AMA has also expressed similar sentiments, and has been putting pressure on the government to commit any saved funds to health care rather than general revenue.

The EAC will continue to monitor the ongoing MBS review, and strongly argue against any initiative which is aimed purely at cutting rebates to patients in order to save money. We will also work hard to counter any ideas or proposals which reflect a lack of understanding of the RVG system, or of the role of bodies such as DoH and MSAC (which are clearly strongly motivated to save money), where these proposals put patients' funding at risk. At the end of the day, whether it is the private or public sector, withdrawal of funding always puts the provision of patient services at risk.

In the meantime, the specialty must remain aware that its billing practices are under close scrutiny. There is every expectation that more anaesthesia services, including more diagnostic and therapeutic services in association with anaesthesia, will be increasingly required as the surgical patient population becomes older and more medically unwell. However, each and every claim for a diagnostic or therapeutic procedure in association with anaesthesia, such as invasive pressure monitoring, must be clinically justified. Documentation of an anaesthesia plan is the best practice. Also, it is essential that close attention be paid to accurate recording of anaesthesia start and finish times. As discussed previously, the large preponderance of anaesthesia time claims for items 23021 (16-20 minutes), 23031 (31-35 minutes), 23041 (46-50 minutes) and so on, is well known to the ACC, government bodies, private health insurers and the like.

OTHER NEWS

The Australian Health Services Alliance (AHSA) group of funds indexed its rebate schedules on 1 January. The rebate for one RVG unit varies from state to state, but the AHSA above-MBS contribution was indexed according to the AMA schedule, which resulted in an average overall rebate increase of 0.9%. AHSA also altered the terms and conditions pertaining to its above-MBS contribution. Notably, accepting the full AHSA rebate means agreeing to the address associated with the doctors' provider number being published on the AHSA website. For some solo practitioners, whose provider number address is also their home address, this has caused concern. The only current option would be to refuse to utilise the AHSA above-MBS product, meaning that the patient would receive only the MBS Fee as their rebate, and would face a higher out-of-pocket cost.

The AHSA terms also allow for doctors' billing practices to be listed, such as the number of patients billed with "no gap", and the level of out-of-pocket expenses where these occur. There are two concerns here. Firstly, the use of a "no gap" product for one patient (or even a series of patients) gives future patients no guarantee they will billed in the same way. Secondly, we do not want to see a situation where patients make decisions purely on the likely level of their fee. The GP's recommendation of a particular surgeon, based solely on their surgical ability and the quality of their services, and in turn the surgeon's decision to engage the services of a particular anaesthetist, again based solely on quality, should be paramount. We do not want to see a "race to the bottom", where doctors try to underbid each other in order to gain work, and therapeutic decisions are made purely on price.

The EAC has been in contact with AHSA and will discuss these matters further with their representatives.

The issue of out-of-pocket costs for doctors' services continues to attract media attention. Unfortunately, these articles are generally very one-sided, with quotes from the health insurance industry containing veiled accusations (and sometimes not-so-veiled) of widespread excessive fee-charging practices. What the media seems to repeatedly fail to mention is the extraordinary profitability of the health insurance industry. Most Australians with private health insurance are now covered by for-profit companies. In the 12 months to September 2016, the health insurance industry enjoyed combined profits of over $1.7 billion (compared to $1.4 billion in the 12 months to September 2015)[1]. This represents a huge amount of money going straight from Australian consumers into the pockets of the health funds. One can only imagine the benefits to Australian health consumers if some of this money went directly into healthcare instead.

What is also rarely detailed is the actual data on out-of-pocket expenses, produced by the federal government's Australian Prudential Regulation Authority (APRA). This shows that currently, 86% of private hospital inpatient services are provided at no out-of-pocket expense to the patient[2]. This level peaked at over 90% for the quarter ended September 2014, but since then it has slowly but surely decreased. The figures for anaesthesia services had also shown a similar trend but interestingly the "no gap" rate suddenly dropped in late 2015, from around 86% to 76%, and the latest available data (for the quarter ended September 2016)[3] shows that it has remained at this level. It appears clear that the rebate freeze is having an effect.

In order to prevent insurers and other parties from distracting the public by critcising doctors, rather than concentrating on the actual facts, it is essential that we adhere to best possible billing practices, and give the media and other parties no excuse to criticise us. As well as the advice above, regarding accurate listing of items and provision of clinically appropriate services, the ASA has repeatedly stated that the AMA fee schedule ($83 per unit) represents a fair and reasonable maximum; and, of course, critical issue of best possible IFC practices cannot be overstated. As always, the EAC stands prepared to assist ASA members in any way we can.

Dr Mark Sinclair
Chair

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INSIDE YOUR SOCIETY

PROFESSIONAL ISSUES ADVISORY COMMITTEE

BEHAVIOURS THAT MATTER

Australian Fellows are fortunate to have a sophisticated training program through ANZCA. Strong peer networks and the continued professional development and support of ANZCA and the ASA guide anaesthetists' professional behaviour throughout their careers. Documents such as ANZCA's *Code of professional conduct*[1], PS16 *Statement on the standards of practice of a specialist anaesthetist*[2], the ASA's PS11 *Code of conduct for members*[3] and the MBA's *Good medical practice: A code of conduct for doctors in Australia*[4], provide some foundations to these behavioural expectations.

BULLYING AND HARASSMENT

Building and maintaining a positive workplace culture through mutual respect of one's colleagues is not an unreasonable expectation[5]. Repeated "unreasonable behaviour – whether intentional or unintentional – such as offensive language, unjustified criticism or complaints, spreading misinformation"[5] or making someone else's work life deliberately difficult may be considered bullying. If the behaviour was reported on the front page of the newspaper, and the reader thought that it victimises, humiliates, intimidates or threatens, it is likely to be considered bullying and illegal under the Equal Opportunity Act, 2010[6].

COLLUSION, PRICE FIXING AND CONSENT

A recent member enquiry regarding anaesthetists working on 'same surgeon double theatre lists' raises concerns about collusion when patients are informed about fees. The ACCC defines price fixing as independent practitioners agreeing on a price rather than competing against each other[7]. Written, informal, verbal agreements or understandings on prices and minimum prices could be seen as price fixing cartel behaviour[7].

Anaesthetists are not just inter-changeable technicians. A patient is referred for an anaesthesia service. A preoperative assessment occurs ahead of surgery where rapport is established and the bespoke anaesthesia plan is developed for that patient. Informed consent and financial consent, where relevant, is obtained during this process[8]. With appropriate planning and surgical booking, the potential for collusion and poor clinical practice could be avoided.

DEALING WITH A HOSPITAL ADMINISTRATION

Anaesthetists rely on hospitals to provide the infrastructure, drugs, equipment, staff, policies and protocols to deliver high quality, patient centred care. Frustrations abound with staggered admissions, inadequate preoperative assessment facilities, poorly trained anaesthesia assistants, lack of information from administration and poor implementation of changes to clinical practice. This may generate stress, disengagement and burnout in the long term. Dr Kaplan developed a compact between the senior medical staff and the hospital administration at the Virginia Mason Medical Centre several years ago[9]. This provided a platform of mutual understanding, accountability and respect from which both parties could negotiate their expectations. Since then, the compact model has been developed in many hospitals throughout the world including the Royal Children's Hospital Melbourne. In this current fiscal environment, the compact may be a useful tool to deliver more effective, efficient, high quality, evidence based, patient centric care.

CPD AND REVALIDATION

Maintaining one's CPD is a professional responsibility. A revalidation process that builds on existing CPD requirements should not be threatening, but part of business as usual. Being 'up to date' and 'fit to practice' matters.

REDUCING NON-VALUE ADDING CLINICAL VARIATION

Due to increased demands, Australia's universal healthcare system's sustainability is being challenged. Healthcare providers need to be innovative, use data analytics and scrutinise operational processes to deliver more cost-effective care while maintaining quality and safety[10]. The

system cannot tolerate largesse. There are clinical and cost imperatives to reducing non-value adding clinical variations in practice[11]. Anaesthetists make clinical decisions daily that have cost and environmental implications. Being mindful of the implications and roles in anaesthesia and perioperative care matters[12].

UNNECESSARY PROCEDURES

As a procedural based specialty, anaesthetists are well placed to question the validity of performing procedures that are unlikely to significantly alter patient outcomes. Tools such as American College of Surgeons' 'NSQUIP risk calculator'[13] may be used to inform the discussion with patients and surgeons about the risks of proceeding with surgery in a particular context. End-of-life care discussions should consider how therapeutic interventions would necessarily benefit the patient[1]. Optimising the use and yield of resources matters.

TEAMWORK

Most outcomes in anaesthesia, whether they involve clinical work, research or teaching, are the result of synergistic efforts by highly functional teams. This requires anaesthetists to be collaborators and leaders. It requires an appreciation of group dynamics, team composition, processes, motivation, cohesion, communication, embracing diversity and creativity, resolving conflict and arriving at useful timely decisions[14].

MANAGING COMPLAINTS

PIAC has revised and renamed PS15 as *Managing complaints*, adopting the principles of open disclosure. This may assist anaesthetists to communicate openly with patients and colleagues when expectations have not been met. Open disclosure is a dialogue that includes an "apology or expression of regret, a factual explanation of what happened, an opportunity for the patient, their family and carers to relate their experience, a discussion of the potential consequences of the adverse event and an explanation of the steps being taken to manage the adverse event and prevent recurrence"[15]. Adverse events that may harm patients do occur. Moving away from a blame culture towards a transparent quality improvement is important. This should include appropriate incident reporting, investigation such as root cause analysis and seeking the advice and support of colleagues.

TRUST

Patients, other healthcare providers and stakeholders must be able to trust anaesthetists to act with integrity, compassion, respect and honesty. Any potential conflicts of interest, whether real or perceived, need to be acknowledged up front[1].

RECOGNISING IMPAIRMENT

Anaesthetists have a responsibility to recognise any impairment whether due to physical or psychological ill health[16], fatigue,[17] substance abuse[16] or cognitive impairment. Maintaining strong peer relationships through anaesthesia departments, private practice groups or journal clubs may assist in providing feedback and support.

BEING A GREAT ANAESTHETIST

Patients have a right to expect the very best care from Australian anaesthetists as stipulated in ANZCA's numerous professional statements[1,2,12,18]. Being diligent in the discharge of one's duties matters[1].

Dr Antonio Grossi
PIAC Chair

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INSIDE YOUR SOCIETY

OVERSEAS DEVELOPMENT AND EDUCATION COMMITTEE

ODEC coordinates all aid directed outside Australia and New Zealand involving ASA members or resources; this includes educational, financial, material and skill-based support. The Committee acts jointly and cooperatively with ANZCA, the NZSA and WFSA and other aid organisations in supporting anaesthesia development internationally, writes ODEC Chair, Dr Chris Bowden.

Currently, ODEC is coordinating projects in Fiji, the Solomon Islands, Micronesia, Timor Leste, Cambodia, Laos and Myanmar. The ASA continues to be a partner in the Mongolian Anaesthesia Project with Interplast Australia and New Zealand; and the ASA continues to partner with ANZCA, WFSA and other bodies in delivering Essential Pain Management in the Asia Pacific region.

THE PREVIOUS YEAR

Twenty-sixteen was a busy year for ODEC with the WFSA World Congress of Anaesthesia held in Hong Kong in August; the ASA remains well represented within the WFSA with Council, Paediatric, Obstetric, Pain, Education and Publications Committee representation.

One of the major WFSA initiatives is the Fund a Fellow campaign, designed to financially support the 52 Anaesthesia Fellowships provided by the WFSA to anaesthetists from low and low-middle income countries. ASA members can contribute to this vital program through the WFSA website at www.wfsahq.org/get-involved/fundafellow.

The primary focus of ODEC has been to support and develop anaesthesia training; and therefore, capacity in the greater Pacific region. Recent projects are looking to provide increasing support in South East Asia.

The Fiji National University (formerly the Fiji School of Medicine) is principally responsible for both Undergraduate and Postgraduate Specialty training in the South Pacific; and the ASA has been heavily involved since the Diploma in Anaesthesia program began in 1996. FNU provides a one-year Diploma and four year Masters in Anaesthesia Specialist Qualification, and has trained over 50 Pacific anaesthetists. Last year saw six Diplomas and five Masters in Anaesthesia graduate from Fiji, Kiribati, the Cook Islands, Vanuatu, Tonga and Timor Leste. The External Examiner in Anaesthesia to FNU is currently an ODEC member (as are the External Examiners to the University of Papua New Guinea and the University National Timor Leste).

The ASA has also been supporting FNU since 2003 through funding up to two Pacific Fellows (ANZCA Provisional Fellows or new Fellows) per year under the Pacific Fellowship Program. The Pacific Fellows are based at FNU in Suva for three months, and have both academic and clinical responsibilities, but the main focus is to support Diploma and Master candidates in exam preparation. The Pacific Fellowship Program has proved extremely successful, and is extremely well received by FNU – there are plans to increase the level of Fellowship support in the future. The Program is coordinated by Dr Justin Burke and information about opportunities can be found by emailing him at j.burke@alfred.org.au.

ODEC Supports

The ASA also supports the activities of the Pacific Society of Anaesthetists (PSA), which represents anaesthetists from member Pacific Island countries. The ASA provides financial and logistic support to the annual PSA Refresher Course, and funds an ASA member to attend as the Pacific Lecturer. The 2016 PSA Refresher Course was held in Suva in September and the ASA Pacific Lecturer was Dr John Copland (Frankston Hospital).

The ASA sponsors at least one Pacific anaesthetist to attend the annual NSC. In 2016, the ASA Pacific Visitor was Dr Luke Nasedra from Fiji, and Dr Bata Anigafutu (Solomon Islands) was sponsored by Sydney Anaesthetics under the ASA Pacific Visitor Program. Both contributed to an extremely interesting and thought provoking ODEC session at the Melbourne NSC.

We also saw the World Congress of Anaesthesia convened in Hong Kong and the ASA (along with the NZSA) funded four Scholarships for PSA members. The ASA WCA Scholarship recipients were Drs Aquila Naqasima and Maika Seru (Fiji), Colom Da Silva (Timor Leste) and Tildena Mandavah (Vanuatu).

Last year saw the inaugural Timor Leste Fellow, Dr Sam Rigg from Darwin, spend three months in Dili supporting anaesthesia trainees in a similar capacity to the Pacific Fellowship Program in Fiji. The Timor Leste Fellowship is coordinated by Dr Brian Spain in Darwin, and there are plans for a second Fellow to return to Dili early in 2017. Interested Fellows should contact Dr Spain at brian.spain@nt.gov.au.

THIS YEAR

Twenty-seventeen will see the biannual Micronesian Anaesthesia Refresher Course (MARC) held; the ASA has assisted in running the Course since its inception in 1994, and the Micronesian Anaesthesia Society (formed in 2005) now runs the course with ongoing ASA and Japanese Society involvement. The MARC, like the PSA Refresher Course, is an extremely important occasion as it provides the only CPD opportunities for member anaesthesia providers.

Plans are in place for the development of a jointly supported (ASA, WFSA and RACS) Anaesthesia Training Centre in the Solomon Islands as a new Project for 2017. The ASA is providing financial and logistic support for the Project, which will see FNU Anaesthesia trainees from the Solomon Islands stay in Honiara under the supervision of SI anaesthetists, rather than train in Fiji. This is an exciting initiative that may well include other Pacific countries in the near future.

ODEC has been involved in supporting Anaesthesia development in Myanmar, Laos and Cambodia, and ASA members assist regularly with CPD activities and clinical training. Dr Suzi Nou is the Scientific Convenor for the 17th ASEAN ACA meeting to be held in Siem Reap, Cambodia, in September 2017.

LIFEBOX

The ASA, NZSA, ANZCA, Life box and Interplast have finalised an agreement for Lifebox Australia and New Zealand, allowing tax deductibility for Australian donations to Lifebox via the Interplast website. Recent requests for oximeters from Laos, Bhutan and Vanuatu are currently under consideration.

VOLUNTEER DATABASE

The ASA Volunteer Database continues to assist with sourcing volunteer anaesthetists for RACS and Interplast surgical missions and ASA supported teaching activities. There are currently over 80 anaesthetists on the database, and further information can be found through the ASA website regarding joining the database.

ODEC welcomes the submission of new projects for consideration. Preference is given to proposals which:

- support the development of anaesthesia in the Asia Pacific region;
- have limited alternative funding possibilities;
- are sustainable over the long term, with good prospects of self-sufficiency;
- have a strong teaching/education component; or
- involve members of the ASA or members of anaesthesia societies of the host country.

INSIDE YOUR SOCIETY

ASA TRAINEE MEMBERS UPDATE

As we embark on another year, Trainee Member Group Chair, Scott Popham, reminds us of the vast network trainee members have access to, including overseas, and the importance of involvement in research.

TRAINEE RESEARCH NETWORKS

Anaesthetic registrars represent a motivated demographic, keen to participate in research either through personal interest or secondary to the requirements of the College. However, various conditions of training are not always in their favour – for example, smaller hospitals may not have research programs or a research lead; short training rotations may leave projects unfinished; and projects may suffer from small patient numbers.

The formation of trainee research networks is a fairly recent phenomenon, demonstrated by both surgical[1,2] and anaesthetic registrars[3], primarily in the UK.

Research networks or collaboratives are made up of trainees with an interest in research who lead recruitment and various other aspects of the project, and are provided with oversight and guidance by academic leaders in the field[1].

The Research and Audit Federation of Trainees (RAFT) website[3] from the UK contains information about the concept of trainee networks as well as advice about joining or initiating such networks.

A CURRENT AUSTRALIAN PROJECT (EPICC)

In Australia the ASA Trainee Member Group represents an existing network of registrars who can participate in such a project. The current project which is underway is the Epidemiology of Critical Care Provision after Surgery Study (Professor Paul Myles is the project lead). Data will be collected on adult surgical patients over the course of a week (potentially May 2017) with a view to examining the epidemiology and effectiveness of critical care admission as an intervention to reduce postoperative mortality.

As of February (which represents the beginning of the trainee year), recruitment of an ASA trainee member at each hospital in Australia was coordinated by our state representatives. The first step by the trainee is to apply for ethics approval for this project for each individual institution. Essentially, each hospital based trainee is given the 'recipe' for the study and makes an assessment of whether it will work at their facility. The information, once collected, will be entered into a central database for analysis. One advantage is that the project can fulfil the scholar role audit activity if the trainees utilise the information themselves for their particular institution (as with all ANZCA projects of this sort, prospective approval via the scholar role tutor is required). The added benefit of participating in the national project is having their name attached to such a project which will appear in, for example, PubMed searches.

To find out more; each state representative has information about the project. Although, at the time of publication of this edition of the *Australian Anaesthetist*, the recruitment process will have been completed, we hope to run similar projects in the future.

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RETIRED ANAESTHETISTS GROUP

SOUTH AUSTRALIA

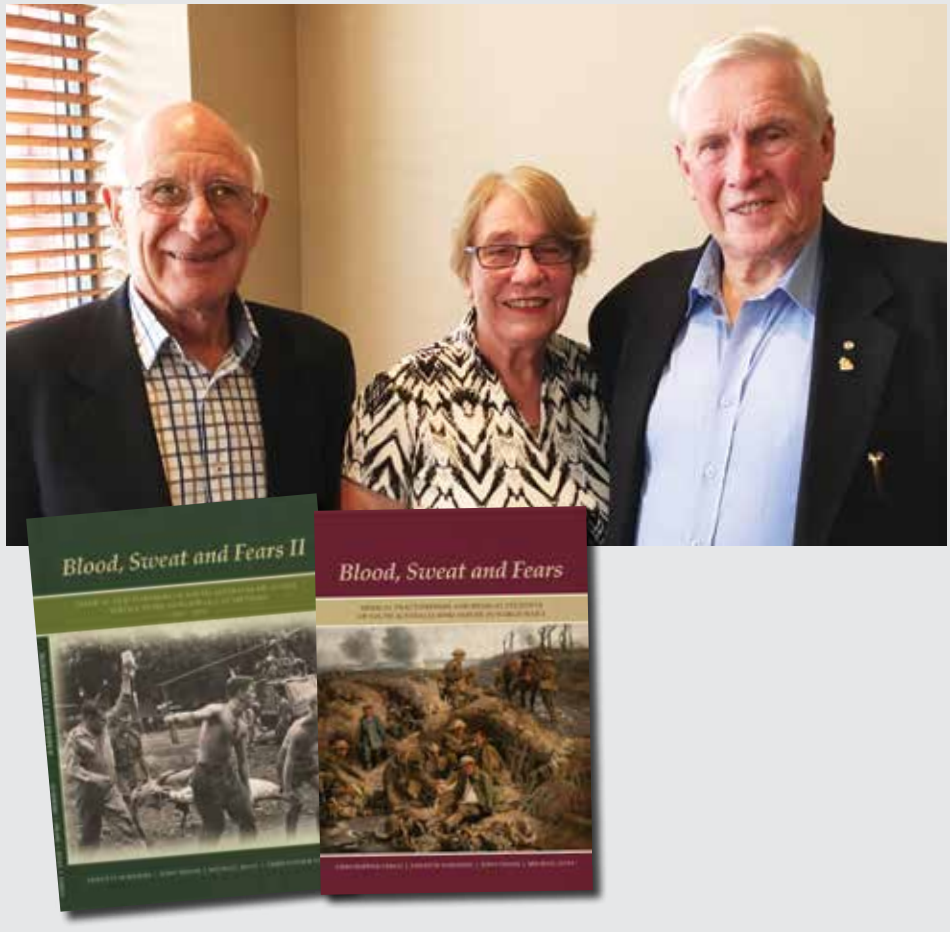
Dr John Crowhurst

The SA Group, with 80 members, meets for lunch regularly at the Kensington Hotel. Several times a year we have a guest speaker and other guests when appropriate.

Our guests at the November 20 meeting included Dr Michael Jelly and Professor Annette Summers, who along with Dr Chris Verco and Dr Tony Swain are the co-authors of the two books: *Blood Sweat and Fears*, the second volume of which was launched by Dr Brendan Nelson AO FRACP, here in Adelaide last October.

Tony spoke about both volumes, which give accounts of those South Australian medicos who served in WW1, Malaya, Korea and Vietnam. There has been much interest in these books, not just in SA, but also in Victoria after I presented them at the November Victorian RAG meeting.

Also in November, on ABC Radio National's Ockham's Razor programme, I presented an account of the legacy of the Anaesthesia 'Events' at Pearl Harbor in 1941, when, after the ether supplies were depleted, thiopentone had to be used. The consequent morbidity and mortality resulted in many more doctors training in anaesthesia and the subsequent birth of Anaesthesia as a medical speciality.



GET IN TOUCH

If you would like to be put in contact with a RAG committee in your State, please visit www.asa.org.au.

Or you can call the ASA offices on: 1800 806 654.

INSIDE YOUR SOCIETY

REFLECTING ON RECOLLECTIONS: HARRY DALY'S ONLINE EXHIBITION

In 2012, the Harry Daly Museum released its online exhibition Recollections – Working in Sydney's Operating Theatres. Recollections presents the reminiscences of a few anaesthetists who have worked in Sydney's operating theatres. Their stories are told through an assortment of audio files, photographs and text.

Since 2012, the site has received over six thousand visitors and more than thirty thousand views. We are also happy to report that the exhibition has been viewed around the world. Primarily, visitors have accessed the exhibition from Australia, the United Kingdom, and the United States. We have also had a selection of visitors from locations such as Denmark, Turkey, France, Spain, and Germany.

The exhibition covers five main themes: designing operating theatres, preparing the patient, working with equipment, smelling ether, and cleaning and sterilising. According to our analytics, the most visited theme of the exhibition was Smelling ether.

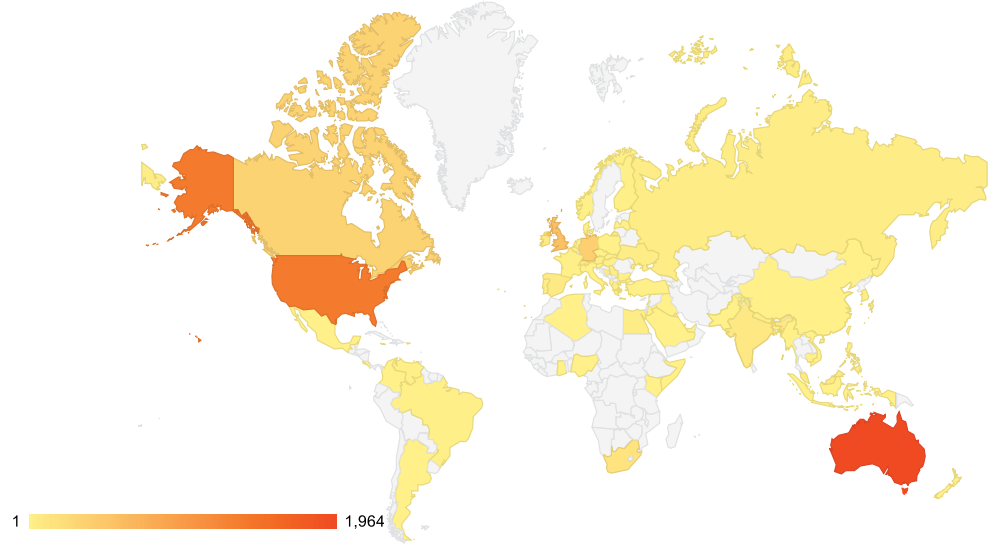
For those who have yet to visit the online exhibition, Smelling ether attempts to convey a sensory experience to audiences. Through sound bites, Professor David Bigg, Dr Des O'Brien, Dr Richard Bailey, and Dr Reg Cammack answer the question "can you remember how operating theatres smelled?" Visit the exhibition to hear their responses.

Another theme that has proved popular amongst visitors is Working with equipment. Visitors can hear doctors reflect on the difficulties with bringing their own equipment when working in private practice. The flexibility and adaptability that was required when adjusting to new equipment is also explored in some depth.

Under this theme are an array of photographs displaying various types of equipment. They range from operating theatre images from the early twentieth-century to anaesthetic machines circa 1970.

Recollections has many more stories to explore. You can visit the exhibition here: https://harrydalymuseumoptheatres.com/.

Rebecca Lush
Curator, Harry Daly Museum



A map showing the geographical spread of visitors to the online exhibition in 2016. The darker the area, the more concentrated the number of visitors.

Expiratory valve without and with scavenging shroud. Image used for the theme Smelling ether.
Harry Daly Museum.

CONTACT US

Contact us to arrange a visit to browse or for research. We are open by appointment Monday to Friday, 9am to 5pm. Please phone ASA on 02 8556 9700.

INSIDE YOUR SOCIETY

AROUND AUSTRALIA

TASMANIAN COMMITTEE

Dr Michael Challis, Chair

A couple of weeks ago we held a successful Part 3 Course in Hobart and feedback from the trainees was positive. Hopefully this has opened their eyes to those aspects of specialist practice that they don't learn much about during their training.

Our Part 0 Course was also held in February, and was a good opportunity for trainees to learn about the important roles that both the ASA and the college play in the lives of trainees and specialists.

The ASM is rapidly approaching and will hopefully rival the success of recent years. The organising committee has been working very hard to provide a high quality meeting that caters for a wide range of interests. Our invited keynote speaker is Professor Steven Shafer.

Our one-day winter CME meeting will take place on Saturday 26 August at Barnbougle – home to the iconic 'Barnbougle Dunes' golf course. Barnbougle Dunes has consistently been rated among the top golf courses in the world since its creation, and was rated as high as number 11 recently. This picturesque location will be well worth the drive (approximately 1 hour) from Launceston.

We continue to work hard to look after the interests of all anaesthetists in Tasmania, particularly in cooperation with the Tasmanian Regional Committee of ANZCA. The ongoing battle for healthcare-related improvements and satisfactory working conditions in both public and private sectors continues. It is critically important that we remain informed of the issues at all levels (state and federal, public and private) that can potentially impact on the practice of anaesthesia. It is also important to be involved, and I encourage anyone who reads this to get involved (if you are not already) in your local committee in some way, even if it only translates into you talking to your local representatives about these issues – we are your representatives. There has been a lot of 'bad press' about doctors (and specialists in particular) recently, and it shows no sign of letting up. The ASA provides a strong voice for you and the profession, and I encourage you to support the society and be involved.

QUEENSLAND

Dr Jim Troup, Chair

Happy New Year to all. I wish you well for 2017 and beyond.

Since the last Queensland update we have had our local Combined CME and state section AGM, the ASA Part 3 course and an enjoyable membership social event.

The Combined Queensland ANZCA/ASA CME meeting and associated Queensland ASA and ANZCA local AGMs in June were interesting and informative. This year there will be no Combined CME Meeting due to Brisbane hosting the ANZCA ASM. A separate evening event combining an educational presentation and the state AGM is planned.

The ASA Part 3 Course was held on Saturday November 5 at the Brisbane Convention and Exhibition Centre. Attendance was good, and the organisers did an outstanding job in finding sponsors. Feedback was positive from trainees and industry.

The Queensland ASA membership social event was held at the Catchment Brewing Co. in West End. This was fortuitously held in the evening on the same day as the Part 3 course. The function was successful with just under forty people attending.

I attended the Queensland Part 0 Course at the start of February. It was great to enlighten new anaesthetic trainees about the role the ASA has in the specialty.

VICTORIA COMMITTEE

Dr Jenny King, Chair

After a busy year of Congress organising and a successful NSC in September 2016, and various other meetings, the Victorian Committee is looking forward to 2017 and serving our members.

The Victorian ASA AGM will be held on Sunday evening 5th March, 2017 at Kooyong Tennis Club and we hope to see many members attend in a convivial environment.

Our first meeting for the year, 'Anaesthetic Exam Bootcamp', was held for trainees in February. Several other

meetings are in planning stage and will be advertised in due course.

Congratulations are also offered to Dr Peter Seal on becoming the Vice-President of the ASA. He is a valuable member of our committee and will be an asset to the federal committee.

WESTERN AUSTRALIA

Dr David Borshoff, Chair

The new Children's Hospital continues to cause headaches for politicians and hospital staff.

Uncertainty surrounds opening time and medical personnel are dealing with yearly contracts and uncertain futures. The management of people and careers has left a lot to be desired.

On top of this, more newspaper articles are appearing about "a construction project horribly bungled by a construction manager that tried to hide the details from being made public, a Government that consistently underestimated the delays, and taxpayers left to foot the bill." It continues to be a messy process mired in disputes and buck-passing.

The Part 0 course for new anaesthetic trainees was held on February 3 and the ASA provided a brief outline to those just starting their anaesthetic career pathway of all the benefits of being a member. An outline of how this organisation continues to support, represent and educate all anaesthetic caregivers, at all levels of training in both the public and private sectors was presented.

Western Australia is still feeling the effects of the post mining boom downturn, and private hospitals have been noticeably quieter over recent months.

The ISL (immersive and simulation based learning) committee ceased to exist as of December 2016. The former ISL committee and WA Health representatives are supportive of a replacement association that will hopefully be formed in February 2017. Representatives from Colleges and Societies will be invited as was done previously.

Since the restructuring of WA Health, the seven new Health Services will be making decisions about education and training and each will have a representative on a small group called the 'Simulation Advisory Committee'. This committee will assist in ensuring consistency and quality of simulation training in WA government hospitals.

Yet again, we have experienced the tragic loss of a young and highly esteemed colleague, Dr Terence Wong. He was surfing at Rottnest Island when his boat struck him in a freak turn of events. He was loved, admired and respected by many in the WA medical community and hundreds of colleagues, family and friends turned out to support his wife Annlynn, and three small children at his funeral service on the 6th January.

INSIDE YOUR SOCIETY

NEW AND PASSING MEMBERS

The ASA would like to welcome all new members from 1 December 2016 to 28 February 2017.

TRAINEE MEMBERS

Dr Douglas Dong	NSW
Dr Auday Hasan	VIC
Dr Anne Veena Jayamaha	NSW
Dr Adam John Mahoney	TAS
Dr Tegan Samantha Owen	QLD
Dr Anna Fiona Pietzsch	QLD
Dr Jacqueline Louise Robson	NSW
Dr Tom Van Zundert	VIC
Dr Lucinda Verco	VIC
Dr Sanjeev Vijayan	NSW
Dr Robert Matthias Wengritzky	VIC
Dr Louisa Ann Corr	WA
Dr Alicia Cullingford	WA
Dr Owen Patrick Gray	WA
Dr Nikki Harmey	WA
Dr Emily Kate Munday	TAS
Dr Sneha Neppalli	WA
Dr Crystal Ellen O'Neill	WA
Dr Aylin Seven	NSW
Dr Gabrielle Eve Sicari	WA
Dr Michelle Stewart	VIC
Dr Angus Edward Patrick Thomson	VIC

ORDINARY MEMBERS

Dr Fiona Barron	NT
Dr Unnikrishnan Chundiran	QLD
Dr Jennifer Jiaping Fu	VIC
Dr Rafsan Halim	VIC
Dr Rodney N. Juste	NSW
Dr Virginia Margaret Knowles	QLD
Dr Surbhi Malhotra	NSW
Dr Jo Mileham	QLD
Dr Julie Ng	WA
Dr Chong Seng Ong	VIC
Dr Wayne Reynolds	WA
Dr Ing-Kye Sim	WA
Dr Li-Ann Teng	VIC
Dr Gladness Nethathe	QLD
Dr Jeremy Wells	SA

IN MEMORIAM

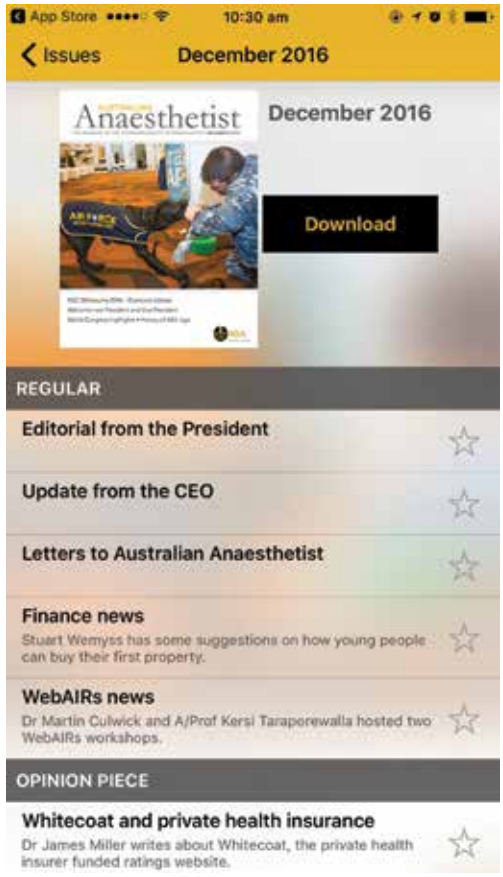
The ASA regrets to announce the passing of ASA members Dr Alick Hobbes, NSW; Dr Henri Frans Lorang, NSW and Dr Jim Coleman, QLD.

If you know of a colleague who has passed away recently, please inform the ASA via asa@asa.org.au.

AUSTRALIAN Anaesthetist

THE MAGAZINE OF THE AUSTRALIAN SOCIETY OF ANAESTHETISTS

Now available as an App exclusively for ASA members!



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ANDROID APP ON Google play

The App can be accessed using your standard ASA member login details.
Please contact membership@asa.org.au if you have misplaced these.

ASA

Australian Society of Anaesthetists

INSIDE YOUR SOCIETY

UPCOMING EVENTS

MARCH 2017

Tasmanian Annual Scientific Meeting

Date: 17-19 March 2017

Venue: Medical Science Precinct, University of Tasmania, Corner Liverpool and Campbell Streets, Hobart

Contact: events@asa.org.au

SA CME

Date: 30 March 2017

Venue: The Lion Hotel, Adelaide

Contact: events@asa.org.au

MAY 2017

Airway Management SIG Meeting 2017

Date: 10-12 May 2017

Venue: Brisbane Convention and Exhibition Centre

Contact: events@asa.org.au

ANZCA ASM

Date: 12-16 May 2017

Venue: Brisbane

Contact: events@asa.org.au

JUNE 2017

NSW Winter CME

Date: 24 June 2017

Venue: Hilton Sydney, 488 George Street, Sydney

Contact: events@asa.org.au

Australian Society of Anaesthetists Membership Achievements

ASA 50-year membership:

Professor Hideo Yamamura, Tokyo
Dr Kenneth Erskine Downes, ACT
Dr Ruth Margaret Hippisley, NSW
Dr Robert Milton Chung, NSW
Dr Rosemary Coffey, NSW
Dr John William Doncaster, NSW
Dr John Joseph McGuinness, OAM, RFD, NSW
Dr Jill Argent Taylor, NSW
Dr Frederick John Nussey, QLD
Dr William Eric Mann, SA
Dr Michael John Hind Hodgson, AM, TAS
Dr Peter Anderson Lowe, VIC
Dr Dorothy Flora Moody, VIC
Dr Peter Grattan Beahan, WA

All 50-year members receive a certificate and lapel badge.

ASA
Australian Society of Anaesthetists

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Exclusive to ASA members

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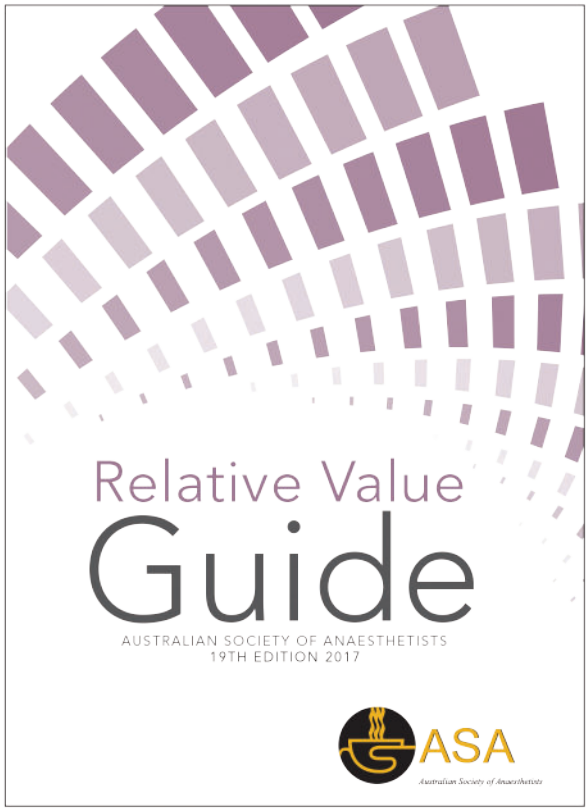
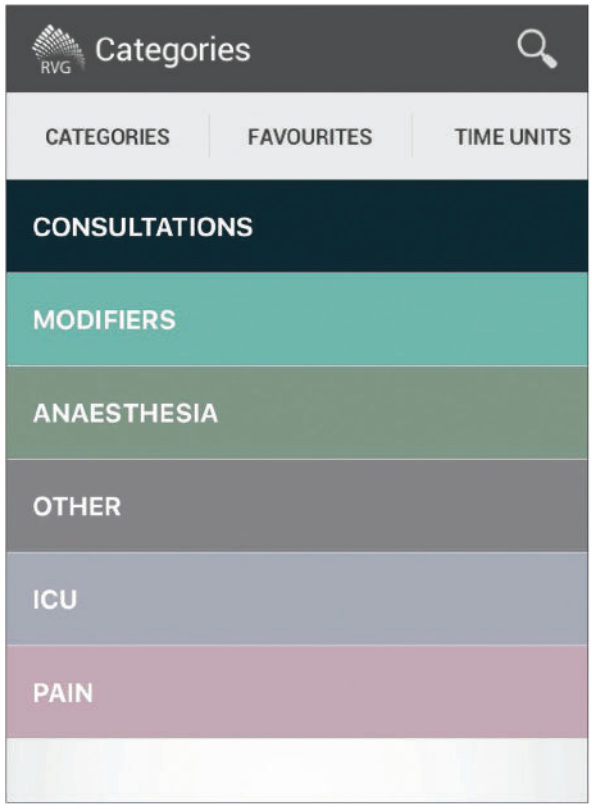


ASA APP VERSION AVAILABLE DECEMBER



The app can be accessed using your ASA member logon details.

Search for "ASA RVG" and look for the ASA RVG fan icon.

For any queries, contact policy@asa.org.au
Members will be emailed once the app is available to download.

RVG

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