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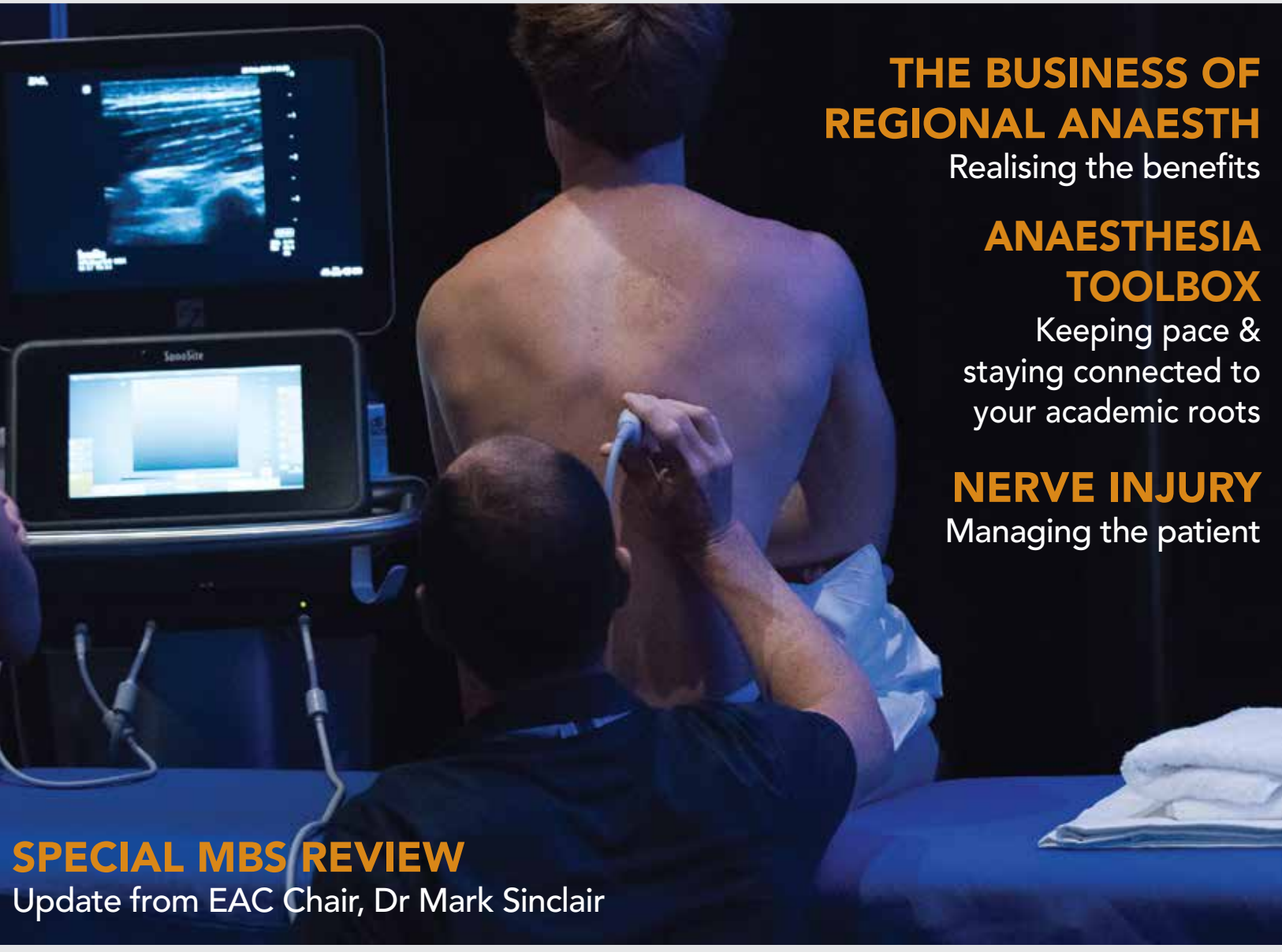
THE MAGAZINE OF THE AUSTRALIAN SOCIETY OF ANAESTHETISTS • JUNE 2017



THE BUSINESS OF REGIONAL ANAESTH
Realising the benefits

ANAESTHESIA TOOLBOX
Keeping pace & staying connected to your academic roots

NERVE INJURY
Managing the patient

SPECIAL MBS REVIEW
Update from EAC Chair, Dr Mark Sinclair

ASURA 2017 Wrap-up

NSC 2017: Speaker Abstracts

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2017 ASA ANNUAL GENERAL MEETING

Please join us to hear reports from key Committee Chairs and the presentation of Awards, Prizes and Research Grants.

Time: 1:15pm on Monday, 9 October 2017
Venue: Riverside Theatre
Perth Convention & Exhibition Centre

Visit **www.asa.org.au** for previous minutes and related documents.

ASA
Australian Society of Anaesthetists

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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.

Letters to *Australian Anaesthetist*:
Letters are welcomed and will be considered for publication on individual merit. The Medical Editor reserves the right to change the style or to shorten any letter and to 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 editor@asa.org.au to submit your letter or to contribute.

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INSIDE YOUR SOCIETY

WOULD YOU LIKE TO CONTRIBUTE TO THE NEXT ISSUE?

The September issue features of *Australian Anaesthetist* will focus on **Retrieval Medicine.** 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 July, 2017**.
- Final article is due no later than **22 July, 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

ANAESTHESIA CLINICAL COMMITTEE (ACC) REPORT

As I write this editorial, the senior leadership of the ASA is firmly focused on the current MBS review. As you read this it is quite possible that the Anaesthesia Clinical Committee (ACC) report will have been released for public consultation. While we have some idea about the thrust of the ACC recommendations, we don't have details yet. I would like to reassure the membership that we will be doing all we can to ensure that the recommendations do not adversely affect the safe, effective and reliable delivery of anaesthesia to our patients. We will also be carefully considering the evidence provided for the recommendations, as we have been assured that the process was not about cost cutting, but about modernising the MBS schedule.

Since its introduction 15 years ago the MBS RVG has been a most successful and future-proof system. Unfortunately, in recent years the only way to make change has been via the somewhat difficult and adversarial MSAC process which has been consistently disappointing. The ASA would welcome the opportunity to regularly interact with the department of health to keep the RVG both current and consistent with the needs of the community.

The ACC report will be open to public comment. You can be assured the ASA and ANZCA will be responding to their recommendations. Depending on the recommendations it may be vitally important that the full membership also responds to this report, especially if the recommendations are regressive and are likely to have adverse consequences for patient access and costs. As you have seen from the ASA/ANZCA survey from last year there is a strong indication that cuts will be met with increased out-of-pocket costs for our patients. If cuts result in this, then it will be a vulnerable group of patients who are worst affected. This will only be stopped by a robust response from all of us. An update of the MBS review by EAC Chair, Dr Mark Sinclair, can be found on page 11.

UPCOMING MEETINGS

This month, I will be representing the ASA at the European Society of Anaesthesiologists in Geneva, and then later, meeting my counterparts from the USA, New Zealand, South Africa, AAGBI, CSA and USA in Canada for the Common Interests Group meeting. We will be discussing a range of issues and seeking advice on how to advance the speciality and care for our patients. We will be discussing our workforce issues, the MBS review, access to reliable supply of critical anaesthesia drugs, and perioperative medicine and the pivotal role of the anaesthetist.

REGIONAL ANAESTHESIA

This issue of *Australian Anaesthetist* focuses on regional anaesthesia. Following on from a very successful ACE Regional Anaesthesia SIG meeting in Noosa, we have invited the keynote speakers to contribute to this issue. Glenn Woodworth has written a fascinating and challenging article on how we keep up to date and in touch with our academic roots. With the sum total of human knowledge doubling every 18 months it has become impossible to keep pace with the changes in our speciality. His anaesthesia toolbox has been set up to provide a forum for life-long learning for anaesthesiologists. It's like completing your training at a premier anaesthesia teaching facility, and then moving on to private practice, but still being able to stay intimately in contact with the program.

Dr Verin Naik has written a comprehensive article on the business regional anaesthesia, or how to sell RA to you administrators. For those of you who are trying to set up a RA service in your hospital this is a great start point in developing your business case. He also points out that to make this work you must learn to communicate as a business professional, not as a scientist.

Ed Mariano has given us a perspective on neurological damage after regional anaesthesia. His article provides insights into the likelihood of a complication, and what to tell your patients before doing a block. He also discusses the value of preparing for such a complication and the value of setting up a team to manage complications in a culture of no blame and compassionate care for our patients.

Steve Watts has given an excellent blow by blow account of how to get the best out of regional anaesthesia for knee surgery. He has shared his tips and tricks for getting adductor canal blocks to work reliably and effectively. If you are considering adding them to your care for knee surgery patients please take careful note of his suggestions.

This is the Global year against pain after surgery, launched by the International Association for the Study of Pain. Amanda Baric and Roger Goucke give us an insight to this project.

This edition of AA will also have the usual features from our committees and their hard work. I trust you will enjoy reading AA and find its articles interesting and thought provoking.

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

MEDICAL SPECIALISTS – MAINTAINING A HIGH STANDARD AND DUTY OF CARE

By David M. Scott and Peter Seal

In recent times, several articles have appeared in the print and electronic media about the alleged 'high fees' and 'poor accountability' of medical specialists. A few weeks ago on his 'Pearls and Irritations' blog, John Menadue posted one such piece titled 'Medical specialists – high fees and poor accountability'. The Australian Society of Anaesthetists (ASA) believes that some of John Menadue's strongly asserted claims merit a measured response, and wishes to address some misconceptions that have arisen. There are almost 5000 specialist anaesthetists in Australia, and they comprise approximately 4.5% of the nation's medical workforce. The ASA has been supporting, representing and educating anaesthetists in this country since 1934.

REMUNERATION

In his preliminary comments regarding remuneration, John Menadue affirmed some emphatic proclamations about bulk billing rates, while demonstrating an incomplete understanding of how this system works currently. He stated that 'In July-September last year, the bulk billing rate for general practitioners was 84%. For specialists it was a meager 30%. At the bottom of the range for specialists who bulk bill were anaesthetists at 10%. For obstetricians it was 55%'.

'Bulk billing' per se requires a doctor to accept 85% of the Medical Benefits Schedule (MBS) fee for outpatient services. It refers to out-of-hospital and outpatient episodes of care. There is to be no additional cost incurred by the patient. This is the domain of the general practitioners especially, and others for whom a significant proportion of their practice consists of consultations. It has minimal relevance in anaesthesia which occurs within an inpatient setting for more than 90% of the time.

The analogous bottom line for anaesthetists' patients is whether they pay anything out-of-pocket. Annually in Australia, there are approximately 8 million anaesthesia services in about 2.6 million patients. The most salient fact about patient billing by anaesthetists by far is that 76% of anaesthesia services attract absolutely no gap, which means precisely zero dollars out-of-pocket for the patient. 'No gap' simply becomes the bulk billing equivalent option for anaesthetists, and many other specialists. Another 14% of episodes of anaesthesia care have a 'known gap' charge, in which informed financial consent (IFC) is mandatory. This means that 90% of anaesthesia services are either no gap or known gap. When an out-of-pocket cost is charged for an anaesthetic service, this averages $85. Almost all anaesthetists forewarn their patients of any gap payments with the appropriate IFC requirement. Thus of course anaesthesia has a very low level of bulk billing, because it doesn't match the above definitions.

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John Menadue contests that 'there are a whole range of specialists who charge fees that cannot be justified. They are having a field day at the expense of the public'. He seems to have based this assertion on the fable of the 'recommended fee'. There is no recommended fee. This is a simple fact. No-one or no agency ever has defined this. If he is referring to the MBS fee, this has not matched adequately the Consumer Price Index since 1985. The ASA considers that it has become a grossly insufficient low estimate of what an anaesthesia service is worth. In addition to this minimal base, the MBS rebate has been frozen already for the last 4 out of an initially supposed 8 years. John Menadue makes no mention of this at all. This omission is extremely disappointing because it is a most crucial and pertinent point.

At the other end of the scale, the Australian Medical Association (AMA) annually publishes a List of Medical Services and Fees. This schedule serves as a guide as to what doctors deem to be a fair and reasonable estimation of the monetary value of a medical service. The ASA maintains an ongoing position that this AMA rate should be the maximal limit. It should not be forgotten that like other medical specialists who have undertaken many years training in a complex discipline, anaesthetists too are taxpayers, employers, and small business owners, and often pay sizeable running costs including indemnity insurance.

Within private medicine in Australia, it always has been the case that doctors' fees and remuneration remain a minor fraction of the entire pool. The incomes and costs of private health insurance companies, private hospitals, and day care facilities completely overshadow those of medical practitioners. For anaesthetists, similarly restricted rebate indexing, at levels below the inflation rate, by the aforementioned health funds, contributes to the likelihood of patients incurring a corresponding increased charge out-of-pocket.

The suggestion of a withholding of Medicare and private health insurance benefits is manifestly unheralded and egregiously unfair to patients, who primarily will be hurt. Isolated charges by a few surgeons and other proceduralists are not common behaviours. When it comes to excessive wages, one needs to look no further than those fees and salaries commanded by some barristers, lawyers, chief executive officers and board members, particularly in the financial and banking world, and in the for-profit private health insurance industry.

ACCOUNTABILITY

The second section of John Menadue's piece related to accountability of medical specialists. He refers to 'concern about the "closed shop" or "old boys' culture" of many specialists associations'. The Medical Board of Australia and the Australian Health Practitioner Regulation Agency independently control the process of determining accreditation and registration standards for all health care workers in this country.

The ASA patient information pamphlet Anaesthesia & You opens with the following sentence which is unequivocally true, 'There is no safer place in the world to undergo anaesthesia than in Australia'. Despite this reality, it is also correct that within any field of endeavour, there will always be individuals who will be impaired or who will be underperforming. In a complicated system which has the capacity to deliver significant benefits to the health of human beings, the potential risk for harm to the public is ever present. The various medical colleges, societies and associations are cognisant of this. The ASA constantly reminds its members of this actuality, and advocates vigilance for detection of those whose performance and standard of care falls below what is safe and acceptable. In addition, the ASA promotes welfare and mentoring programs for all anaesthetists.

John Menadue concludes with the bold edict that 'Surely a federal parliamentary enquiry into the performance of medical specialists in regard to fees and accountability is long overdue. Many of them are having a lend of us!'. Far from 'having a lend', the medical profession has delivered first-class, world standard health care, with the highest possible duty of care, to the people of Australia for more than a century and a half. The ASA does not support the need for such an investigation, or see the justification for its inevitable expense. If an enquiry were to be held nonetheless, we would welcome the opportunity to testify before it armed with all the relevant facts and numerical data at our disposal. Instead of opinion, we would be able to provide irrefutable information about medical specialists' fees and accountability.

This article was first published on the Australian Society of Anaesthetists' website on 23 March 2017.

ASA UPDATE FROM THE CEO

MARK CARMICHAEL, ASA CEO

CIG MEETING, CANADA 2017

June has historically been the time of the annual Common Issues Group (CIG) meeting, and this year is no different. This year's meeting, scheduled for June 19 to 21, will be hosted by our Canadian colleagues just prior to the Canadian Society's annual meeting. The last CIG meeting in Canada was in 2013 in the picturesque mountain town of Banff, and while the meeting was a success, it coincided with the floods that hit Canada at that time, causing the cancellation of the Canadian Society's Annual meeting scheduled for the nearby city of Calgary. Sadly, a number of people lost their lives and much property was destroyed in those floods. I'm looking forward to another interesting (and drier) meeting this year.

The ASA will be represented by A/Prof. David M. Scott, Dr Guy Christie-Taylor (Immediate Past President), Dr Peter Seal (Vice President) and myself. Also in attendance will be the senior Officer Bearers and Executives from the AAGBI, the American Society of Anesthesiologists, the Canadian Society, and our colleagues from both the New Zealand and South African Societies.

Importantly, each Society contributes to the Agenda and leads discussion within the meeting on their particular topics. At this year's meeting the ASA will be leading on four topics – the MBS Review within Australia, Workforce (the current Australian situation, which is relevant for all countries), Drug Labelling and availability (a topic our North American colleagues are well versed on), and Perioperative Medicine within Australia and New Zealand (with a working paper prepared following the meeting in October 2016 being the basis for the discussion). As always, it will be of great interest to learn where other countries are up to in relation to these issues.

From a governance perspective, the other attendees have expressed a great desire to learn about the governance changes the society implemented in 2016, i.e. the establishment of a Board of Directors responsible for the business of the Society and a Council who look after the issues as they impact on the profession within Australia. As a result, I have been given the opportunity to present on this important initiative.

GOVERNANCE

I am pleased to report that all four member-elected Board Directors – A/Prof. Scott and Drs Miller, Nou and Seal – have confirmed their intention to serve the second of their two-year terms, along with Immediate Past President, Dr Guy Christie-Taylor. As a result, there will be no need for elections at this year's Annual General Meeting.

ASA BUZZ

In the March edition of *Australian Anaesthetist*, Dr David Borshoff (WA) wrote a thought provoking Letter, titled 'Calling All Anaesthetists or Anaesthesiologists', in which he provided a succinct argument for a possible change of name, to reflect, as he put it, "the medical excellence that underpins anaesthesia in Australia". Clearly, Dr Borshoff's letter has struck a chord, judging by the responses from members, some of which are published in this edition. Quite obviously, this is an issue which members have strong views on, and may well become a topic of further discussion and debate into the future.

MEMBER SURVEY 2016

In 2016, a great many members completed the service-focussed Members Survey. The results of which have been used to refine services to you, our members. More recently, the ASA has commissioned a review of its overall communication strategy, covering engagement with members, government, like bodies eg. the AMA, sponsors and the general public. By and large the review conducted by

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an external agency found that the communication and brand identity was strong, consistent and the methods of delivery were integrated, leading to an overall strong communications platform. At the same time, it provided further recommendations which could improve the overall offering. These recommendations are being considered by the Board and may well shape some changes into the future.

MBS UPDATES

At the time of writing the much-awaited Draft Report from the Anaesthesia Clinical Committee (ACC) in relation to the MBS had not yet been released. By now it may well have been. Members are assured that the ASA will be taking a strong interest in the recommendations contained within the Draft Report and will no doubt be taking every opportunity to comment on them.

NSC 2017

Congratulations in advance to 2017 National Scientific Congress Convenor, Dr David Law, and his wonderful team in Perth, who have put together what is shaping up to be a most exciting meeting. With registrations already filling quickly I would encourage you all to take the opportunity to visit Perth between October 7 and 10 for what I am sure you will find a most rewarding NSC.

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

LETTERS TO AUSTRALIAN ANAESTHETIST

STILL CALLING ALL ANAESTHES(IOLOGISTS)

Thank you for publishing my letter last issue proposing a change in terminology for our profession.

I read with interest the addition of your editor's note explaining the result of a 'detailed assessment' during Prof. Michael Cousins' ANZCA presidency. That result was to keep the 'anaesthetist' terminology – despite its failure to indicate the medical expertise behind the profession, as I previously argued.

Perhaps I could point out to readers* that Prof. Michael Cousins is now retired, and his presidency was five Australian Prime Ministers ago. With time, sentiment can change.

In a constantly evolving healthcare environment, it is helpful to keep an open mind and consider all new proposals – particularly when our organisation endeavours to engage and stay relevant to its younger membership. This will be more difficult if the older, more conservative element of our membership stifle these conversations.

I would encourage the ASA, and ANZCA, to undertake consultation with the new generation of fellows to see if they want to change our name for the future, thus fulfilling our aim of improving our 'brand', standing and influence within the profession and community.

This is a chance for us to reinvent, get on the front foot and respond to the contemporary issues of task substitution, workforce oversupply and lack of MBS indexation.

*views expressed my own

David Borshoff MBBS FANZCA

Cottesloe, WA

-OLOGISTS IN NEW ZEALAND

I am the current President of the New Zealand Society of Anaesthetists.
I note with interest the correspondence from Dr David Borshoff in your March 2017 issue regarding a name change to Anaesthesiologist. As he alludes to, we are having similar discussions across the ditch. Interestingly, as part of a survey late last year we polled our members on this topic and 44.8% were in favour of changing to anaesthesiologist, 40.5% were against, and 14.6% were undecided.

Also of interest, the ASA USA started off as the Long Island Society of Anesthetists (1905), and then became the New York Society of Anesthetists in 1911, which eventually became a national body called the American Society of Anesthetists in 1936. A further name change occurred in 1945 to the current American Society of Anesthesiologists.

I have been learning the art of anaesthesia since 1991 and have always thought of myself as an anaesthetist; however I concur with Dr Borshoff's reasoning and perhaps it is time to undergo metamorphosis into an -ologist.

I detect in Dr Borshoff's original letter somewhat of a challenge: "Should there be enough support, the combined 2020 meeting in New Zealand might be an opportune time to implement any change."

I am hopeful that we in New Zealand are up for such a challenge and look forward to further debate.

David Kibblewhite

NZSA President

IN SUPPORT OF BORSHOFF

Further to Dr David Borshoff's letter and note in the March issue, I write to endorse the change of name of our speciality to 'anaesthesiology', and that of our practitioners to 'anaesthesiologists'.

I suggest that this year, 2017, the 25th anniversary of the foundation of the ANZCA is a most appropriate time to have a plebiscite of all ANZCA Fellows, Trainees and all ASA members. A positive

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result would be a fitting achievement to celebrate this anniversary, and a demonstration of the close relationship of the ASA and ANZCA.

To that end I have also asked the Presidents of the ASA and ANZCA, Prof. Michael Cousins, Prof. Barry Baker and the President of the Royal College of Anaesthetists, which is also celebrating its 25th anniversary this year to look to a uniform name change. Perhaps the RCoA too may consider joining us to associate more closely with our anaesthesiology colleagues in > 150 countries?

Dr John Crowhurst BPharm MBBS Dip. (Obst.)RCOG FANZCA FRCA

Linden Park, SA

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.

INVITATION TO PARTICIPATE IN A RESEARCH STUDY ON RETIRING

We are looking for people who are willing to take part in a research study that investigates the contribution of various social factors to adjustment during the retirement transition.

Over three million Australians are currently retired from the work force, and while we know financial planning is important in this process, about a third of people still fail to adjust well despite this planning. Research is now pointing to the importance of various social factors, and our current research project investigates the contribution that social relationships make to retirement adjustment.

The study is being conducted by researchers at The University of Queensland, and has been reviewed and approved by the Behavioural and Social Sciences Ethical Review Committee (Approval Number: 2015001736). Taking part will involve you answering some questions in online surveys about your workplace, retirement preparation, social relationships, and sources of support and well-being. This is a three-phase study, so you will complete similar surveys three times during your retirement transition – at up to 6 months before retirement, within 1-2 weeks once you have retired, and again 2-3 months following retirement.

These surveys will each take about 30 minutes to complete. To thank you for your participation, we will put you in a prize draw where you have the chance to win Coles Group and Myer eGift cards on completion of each survey (Survey 1: 10 x $20 cards will be drawn; Survey 2: 10 x $30 cards will be drawn; Survey 3: 10 x $50 cards will be drawn).

So if in the next 6 months you plan to stop full-time work and fully retire (doing part-time, temporary or volunteering work is okay) and would like to be involved, please visit the following link: http://www.groups4health.com/survey/

After completing the first survey, we will contact you again to send another survey with similar questions. The purpose of this is to track your experience in the transition to retirement.

The Groups 4 Retirement project is part of the Groups 4 Health program (www.Groups4Health.com). The project is being led by Professor Catherine Haslam and Dr Ben Lam. If you have any questions about the project please get in touch with us via the following email: ben.lam@uq.edu.au.

FEATURE

MEDICARE BENEFITS SCHEDULE (MBS) REVIEW

DR MARK SINCLAIR
EAC CHAIR

At the time of writing, the Anaesthesia Clinical Committee (ACC), performing the review of MBS items covering anaesthesia services, has completed its draft report and lodged it with the MBS Review Taskforce, headed by Prof. Bruce Robinson. Based on stakeholder meetings held prior to the commencement of the MBS Review, the ASA has always been of the understanding that the draft report would now be released for public comment. However, it now appears that this is not the case. The Taskforce will forward the draft report to the Minister for Health for consideration, before it is made public. We do not know exactly when it will be made available to us.

As members will be aware from previous articles in *Australian Anaesthetist*, and from the regular e-news updates by David M. Scott, the ASA has a number of concerns about the process to date.

The ASA rightly considers itself to be the key stakeholder in all matters relevant to the Relative Value Guide (RVG). The ASA is after all the author of the document, and past Chairs of the Economics Advisory Committee (also Past ASA Presidents, and ASA Life Members) Drs Greg Deacon and Andrew Mulcahy worked tirelessly for many years to have the RVG incorporated into the MBS. This finally occurred in November 2001. The process did not just involve the Herculean task of assessing each individual item for relevance and accuracy, but also a huge amount of time and effort on statistical and economic modelling, in order to comply with the government's requirement for cost-neutrality, in what was a major overhaul of a significant section of the MBS. Many hours also had to be devoted to face-to-face meetings with Health Ministers and Department of Health officials, as well as other stakeholders such as the AMA, the private health insurance industry, and consumer groups.

> The EAC therefore has a detailed knowledge of the RVG in the MBS, its background and history, and the reason behind the descriptors and unit allocation for every RVG item. Its level of knowledge and understanding is unmatched by any other body, including the ACC.

The EAC has continued to update the RVG on a regular basis, which again requires much time and effort. The introduction of a series of time and complexity based anaesthesia attendance items into the MBS in 2006, rather than a single item, was one example of a very positive outcome for both patients and anaesthetists. Again, the process involved much time and effort, over many years.

Members will no doubt be aware of the extreme difficulty involved in obtaining additions to the MBS in recent years. For example, despite proven benefits to patient care, the Department of Health (via the Medical Services Advisory Committee – MSAC) has not supported the introduction of MBS items to cover the use of 2-D ultrasound in anaesthesia practice, or the extension of Medicare funding to cover local anaesthetic nerve blockade beyond the limited number of procedures that are currently covered. These and other initiatives again require ongoing submissions, reports and meetings.

The EAC also has a long history of assisting anaesthetists to understand the system, and in the correct use of the item numbers. This regularly requires further liaising with the Department of Health (responsible for instituting government health policy), The Department of Human Services (which is responsible for administering Medicare) and other bodies.

The EAC therefore has a detailed knowledge of the RVG in the MBS, its background and history, and the reason behind the descriptors and unit allocation for every RVG item. Its level of knowledge and understanding is unmatched by any other body, including the ACC.

> …there has been very little communication between the ACC and the ASA…

However, there has been very little communication between the ACC and

FEATURE

the ASA in the lead up to the production of the report. The Chair of the ACC, Dr Jo Sutherland, along with Prof. Robinson, has met with the Presidents of the ASA and ANZCA. Here, general issues were covered, but no specifics of the changes to the RVG the ACC wishes to make were discussed. Fortunately, ACC member and former ASA President Dr Jim Bradley has brought a number of questions to the EAC in order to inform his input into ACC deliberations. However, it is essential to note that he does not represent the ASA on the ACC. Each ACC member is appointed as an individual, and must abide by the Taskforce's rules regarding the confidentiality of certain committee processes. From the time the MBS Review was announced, the Colleges, Societies and Associations have been assured that their input would be valued, and that free and open communication between these bodies, and the MBS review committees for the individual specialties, would be encouraged. This has proven to be far from the case for the review of the RVG.

All members of the EAC expressed a willingness to be involved, and were nominated. None were appointed.

The members of the ACC were appointed by the Department of Health. All members of the EAC expressed a willingness to be involved, and were nominated. None were appointed. The reasons for the inclusion of some committee members, such as Dr Bradley, Dr Genevieve Goulding (ANZCA Immediate Past President), and Dr Sutherland herself (ANZCA Safety and Quality Committee) are obvious, and have the support of the ASA. However, the level of knowledge and understanding of the RVG on the part of many on the ACC is unknown. (The committee consists of seven anaesthetists, three surgeons, one GP, and one consumer representative). The inclusion of an EAC member, or at the very least a full and open dialogue as to what the ACC has been considering, would have been most helpful to the process.

So, despite being the key stakeholder, at this stage the ASA has only limited indications as to what the ACC has proposed. However, what little we do know points to some major cuts to the funding of anaesthesia services.

Numerous Items in MBS Subgroup 19 (covering therapeutic and diagnostic services performed in association with anaesthesia) have, we believe, been targeted for deletion, and possibly to be 'bundled' into base items where such services are often required. The specific reasons, or what evidence is being used to guide such deletions, is unknown at this stage. The strength of the RVG, and the reason the ASA will fight hard to preserve its integrity and aims, is that each individual patient's Medicare rebate is based on exactly what their service entails, rather than some estimated, anecdotally based 'average'. To pursue a 'bundling' agenda goes entirely against the concept of the overall MBS Review, which is to modernise the system and ensure that funding is allocated accurately and appropriately.

The anaesthesia attendance items may also have received attention, but again we do not know the detail of the changes the ACC wishes to make. A huge amount of effort, again including detailed economic modelling, went into the introduction of these items. They are not based just on time, but also have detailed complexity and documentation requirements which must be met. It is well recognised that best possible pre-anaesthesia assessment practices result in better patient outcomes, which is supposedly what the MBS Review is there to support. Furthermore, there is again absolutely no cause for concern about Medicare expenditure. The expenditure on these new items was in fact significantly less than that predicted by the initial modelling, and again, excellent value for money has been obtained. Any changes that might impact on the provision of pre-hospital anaesthesia consultations would have very negative effects on patient care and outcomes.

We do not know the detail of the changes the ACC wishes to make…

The MBS Review Taskforce has repeatedly emphasised that the review is not aimed merely at cost savings, and that no specific savings target has been put in place. The ASA will therefore strongly oppose any measure which is aimed purely at saving money. For anaesthesia specifically, there is no justification for deleting items purely on the basis of cost, or an observed trend in growth. The MBS Review Taskforce's own figures, presented at various stakeholder forums, reaffirm that Medicare expenditure on anaesthesia is only 23% of the expenditure on surgical MBS items. Furthermore, expenditure on anaesthesia is not just related to surgical services, but also to other specialties such as radiology and dentistry. Australian anaesthetists provide the same world class quality of services as our surgical colleagues, are just as highly qualified, and take equal and often greater responsibility for safe patient outcomes. Clearly, our services already represent excellent value for money, and we must not allow those with cost cutting agendas to further devalue our specialty. Going on the results of our recent survey of Australian anaesthetists, cutting Medicare rebates could have a significant impact on out-of-pocket costs to patients. The Taskforce was expressing concerns about out-of-pocket expenses, even before the review actually commenced. Clearly the issue of out-of-pocket expenses will need to be emphasised in our response to the report. In particular, any cuts to patient rebates for high-volume procedures such as anaesthesia for gastrointestinal

endoscopy (where out-of-pockets are usually minimised) could have a dramatic effect on the incidence of patient out-of-pocket expenses.

Since the MBS Review was announced, in anticipation (unrealised) that the EAC might have some formal involvement in the process, the EAC has also been considering the matter of changes to the MBS RVG. A small number of items may need adjustment based on 2017 practices, as opposed to 2001 when the RVG was introduced into the MBS. Any such changes will be very carefully considered, and based on best available evidence. Any proposals for cuts to MBS items which are not backed by evidence will be strongly opposed by the ASA, keeping in mind that very high levels of evidence (often unattainably high) are required before any consideration is given to additions to the MBS.

As soon as the ASA has the ACC draft report in hand, the EAC will analyse its recommendations in detail, and inform the specialty of our opinions immediately. It is essential that all anaesthetists who base any part of their billing on the RVG read our output, and act on it by contacting the Taskforce and the Minister with any concerns. The assistance of the local state ASA Committees of Management will no doubt be valuable here, and the state Chairs will be kept fully informed at all times.

Representatives of the ASA met with Mr. Michael Ryan, a Senior Advisor to the federal Minister for Health (Mr. Greg Hunt), on May 16, in Canberra. Mr. Ryan has a long history of involvement with the RVG system, going back to its early days when he was a senior Department of Health official. He is quite familiar with the workings of the RVG, and we were able to have a very useful discussion, outlining our significant concerns about what the ACC may recommend. Our main message was that the Minister should definitely not take on board the recommendations of the ACC without detailed input from the ASA

ASA members are encouraged to contact the ASA with any queries or concerns, either by telephone (1300 806 654) or email (policy@asa.org.au).

ASURA 2017 REPORT

The recent Australasian Symposium on Ultrasound and Regional Anaesthesia (ASURA) meeting, hosted by the ACE Regional SIG, attracted over 250 delegates to sunny Noosa between 23 to 26 February.

As always, Noosa was a popular venue with many attendees bringing their family with them. The symposium was a combination of plenaries, concurrent sessions and workshops. International keynote speakers Professors Viren Naik and Ed Mariano and A/Prof. Glenn Woodworth combined their expertise in both education and regional anaesthesia (each have separate articles in this issue).

Prof. Viren spoke extensively on his experience as an educator and shared his skills and expertise with others on how education theory can help those learning, or teaching regional anaesthesia.

Prof. Mariano's topics included the development of techniques and patient care pathways to improve postoperative pain control.

A/Prof. Glenn Woodworth is an active education researcher and is particularly interested in the assessment of competency, the effectiveness of different educational methods in medical education, and the use of education technology. Woodworth has pioneered the development of the Anesthesia Toolbox.

Delegates were able to choose from a number of different sessions including: Social media is the best channel for knowledge distribution?, Regional anaesthesia for abdominal surgery, What's new in regional anaesthesia?, Nerve injury: prevention and management, Teaching a practical skill, Regional anaesthesia in paediatrics, Entrusting your trainees to do blocks, The paravertebral block and Designing a regional anaesthesia fellowship program.

Workshops were offered on two of the days; the Thursday workshops were aimed at trainees and those new to clinical work, offering skills training and a non-technical all-around-the-block session. Sunday's sessions were broken up into ten anatomical workshops.

The Social program made the most of the gorgeous Noosa weather with welcome drinks on the Thursday afternoon; morning yoga in Lions Park on the Friday and Saturday, a wine and cheese tasting on the Friday and the sunset dinner and cruise along the river on the Saturday night.

Thank you to our exhibitors Admedus, AON, BBraun, Fujifilm Sonosite, GE Healthcare, LifeHealthcare, Medibroker, Surgical Specialties, Surimex and Whiteley Diagnostic for supporting such a great event.

Special thanks to Convenors Dr Neil MacLennan, A/Prof. Jenny Weller and Dr Chris Nixon for producing such an educational and thought provoking conference. We look forward to seeing where ASURA 2019 takes us!


Convenor Neil MacLennan welcoming attendees


ASA President David M. Scott presenting


International invited speaker Ed Mariano


International invited speaker Viren Naik


Alwin Chuan presenting


Michael Barrington presenting


International invited speaker Glenn Woodworth


Panel discussion


Regional anaesthesia for abdominal surgery masterclass

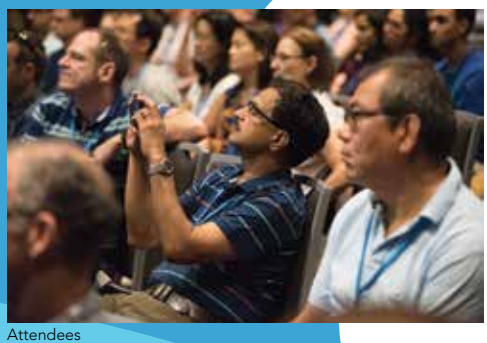

Convenor Neil MacLennan, speaker Ed Mariano and David M. Scott


Panel discussion


Exhibitors


Thursday workshop


Workshop


Attendees

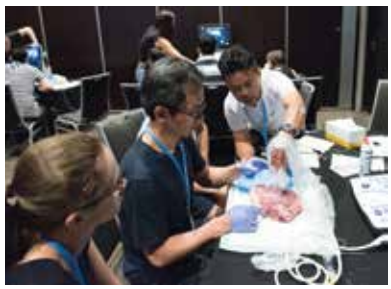

Attendees at ASURA 2017

Getting hands on with exhibitors

Exhibitors


Exhibitors


Thursday workshops


Thursday workshops


Sunday workshops


Hands on Sunday workshops


Sunday workshops


Sunday workshops


Session


Regional anaesthesia ERAS and total joint arthroplasty session


International speaker Ed Mariano


Regional anaesthesia in obstetrics session


Welcome drinks


Welcome drinks


Welcome drinks

Exhibitors


Chatting to colleagues at welcome drinks

Checking out the program


Sunset dinner cruise


Sunset dinner cruise


Sunset dinner cruise


Sunset dinner cruise


Sunset dinner cruise

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KEEPING PACE & STAYING CONNECTED TO YOUR ACADEMIC ROOTS

Buckminster Fuller famously coined the term "knowledge Doubling Curve." He noted an exponential growth in the amount of information available every year. From 1750 to 1900, he estimated that it took 150 years for the amount of human knowledge to double. By the end of World War II, knowledge was doubling every 25 years. Today, the amount of clinical knowledge is estimated to be doubling every 18 months[1].

The Institute of Medicine acknowledged in its 2012 report that practicing physicians frequently have knowledge gaps that produce wide variations in clinical care and impact patient outcomes[2]. For example, do you know the current evidence for the technique and effectiveness of quadratus lumborum blocks or how the new diabetes drug exenatide affects gastric motility? How is a physician expected to keep up with the ever expanding body of knowledge?

The traditional method for physicians who have matriculated from training has been to read an occasional journal, or attend a continuing education or professional society meeting. This is both inefficient, and it can be difficult to translate this type of education into actual practice. Harken back to your days as an anaesthesia specialist in training. You were immersed in a culture of learning with ample opportunities to learn from experts, discuss cases and attend educational sessions like grand rounds or journal clubs. What if you could continue to remain connected to the academic community throughout your career in private practice (and satisfy some of your continuing education requirements)? Fortunately, rapid changes in technology can offer some solutions to these problems.

On the flip side of lifelong learning, anaesthesia trainees face a different set of problems. Anaesthesia training has been rooted in the Halstedian apprenticeship model of training and has not really changed in the last 50 years[3]. In this model, the majority of trainee learning takes place in the clinical environment under the tutelage of a faculty mentor. Several studies have documented the variability in trainee education simply based on the variability in clinical cases

they encounter during training[4]. At the same time, transformative changes have been taking place within K-12 and higher education. One of the most significant trends has been the introduction of blended learning. Blended learning supplements in-classroom instruction with computer-based self-guided online learning activities[5] and is fast becoming the norm in these teaching environments. Online activities can be accessed 24/7 and provide unique supplemental activities that can be difficult to accomplish in the classroom setting.

THE ANESTHESIA TOOLBOX

In 2014, Oregon Health and Science University Department of Anesthesiology and Perioperative Medicine (OHSU) embarked upon a project to collaborate with other anaesthesia departments to develop online materials to supplement anaesthesia trainee education. Multiple academic anaesthesia departments worked together to define goals, objectives and curricula for each subspecialty training area (obstetric anaesthesia, paediatrics, trauma, ambulatory, vascular, preop evaluation, regional anaesthesia, etc.). This was followed by the creation of peer-reviewed learning resources according to these curricula that could be delivered to anaesthesia trainees via an online learning platform – the Anesthesia Toolbox[6]. The goal was to bring anaesthesia training into the 21st century by introducing a blended learning approach to anaesthesia training[7,8]. In addition to enhancing the traditional learning taking place in the clinical setting, the blended learning approach would supplement the daily clinical experience with a structured curriculum that would address knowledge or skills gaps that can occur due to the variability in trainee experiences based upon the clinical cases they encounter. Another goal was to ensure that the Toolbox would serve as an authoritative source of peer-reviewed material on the internet. Although a vast amount of anaesthesia training material is currently present online, trainees and lifelong learners may find it difficult to find the material with the 'highest' educational yield, that can be trusted. The materials in the Toolbox are peer-reviewed for both content and instructional design, and have been developed with defined learning objectives in mind. This is in contrast to much of the material online that has not been peer-reviewed and may only provide a superficial treatment of the topic at hand.

The project has significantly evolved over the last two years. It now includes 45 participating academic anaesthesiology departments and over 3,000 users. The majority of the academic departments are in the US; however, the Toolbox also includes departments in Canada, Australia and New Zealand. The over 400 learning resources in the Toolbox include podcasts, videos, e-learning modules, quiz questions, lectures, etc. Two to three items are being added to the Toolbox every week. The resources are made available to members through an online portal and learning management system. The Toolbox online learning management system allows assignment of e-learning resources to learners (coursework) and self-guided access to individual content for self-study or continuing medical education credit.

SOCIAL MEDIA

The current phase of the project is the introduction of an online portal designed to promote connectivity and collaborative learning, including discussion forums, news feeds, online journal clubs, online problem-based learning discussions etc. through the utilisation of a social media type platform. This portal is integrated with the online learning management system and has been undergoing pilot testing in the later part of 2016. It is scheduled for general release in June of 2017. Although the Toolbox was effective at hosting online content, assigning curricula, tracking learner progress and delivering a quiz-bank; it did not take advantage of the newer social media technologies that can be used to nurture communities of practice or learning. The introduction of Web 2.0 tools ushered in an era of social media with crowd-sourced knowledge, broadcasting (think tweeting or blogging), following and social relevance (relevance or trending of content based on likes, shares, views, etc.)[9]. The corporate world has rapidly developed and adopted sophisticated software tools to create online communities of practice[10].

What if you could remain connected to the academic community throughout your career in private practice?

These corporate communities are created to foster internal knowledge management and learning and/or to create communities of customers around their products. For example, I recently wanted to upload my photos of our trip to Australia and New Zealand from my Apple Macintosh computer photo library to Shutterfly. What did I do? I googled the search term and selected an item that entered me into a customer support forum from Shutterfly that answered my question. This customer support forum was developed using a commercial social media platform. Alternatively, I could also search for "how to make Pavlova" and be directed to multiple websites, many of which represent communities of cooks suggesting different recipes. Each recipe has ratings and reviews. I could easily 'like' or 'share' the recipe with others. All of this is easily accomplished with commercially available social media software.

Others in healthcare have begun to explore how to use social media tools in medical education[11,12]. OHSU has leveraged a commercial software product to create a new community of anaesthesia learning. What is unique in this approach is the tight integration of the social

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media platform with a robust learning management system. The addition of the social media portal has allowed the Toolbox to add capabilities, including a powerful search engine to peruse all of the content on the site, discussion forums, "ask a clinical question", posting of TILs (Today I Learned) or Clinical Pearls, and Wikis for different types of clinical case management. In addition, the online discussions are a platform to deliver online journal clubs and problem-based learning discussions moderated by academic faculty.

COMMUNITY CONNECTION

One of the principle goals of the portal and the Toolbox is to connect lifelong learners with the academic community. The portal will provide a ready means to access peer-reviewed content as well as engage with academic faculty via discussions and posting clinical questions or participating in online journal clubs or problem-based learning discussions. The majority of these activities will be associated with continuing education credits. However, the true value of the project will only be realised if it is successful in engaging the private practice community with the content and encouraging them to interact with their academic counterparts to create a vibrant learning community. Such a community has the potential to provide a low-cost, efficient mechanism to learn and ultimately help us take better care of our patients.

Glenn Woodworth MD

Editor in Chief, Anesthesia Education Toolbox, Regional Anesthesia and Acute Pain Medicine Fellowship Director, Oregon Health and Science University.

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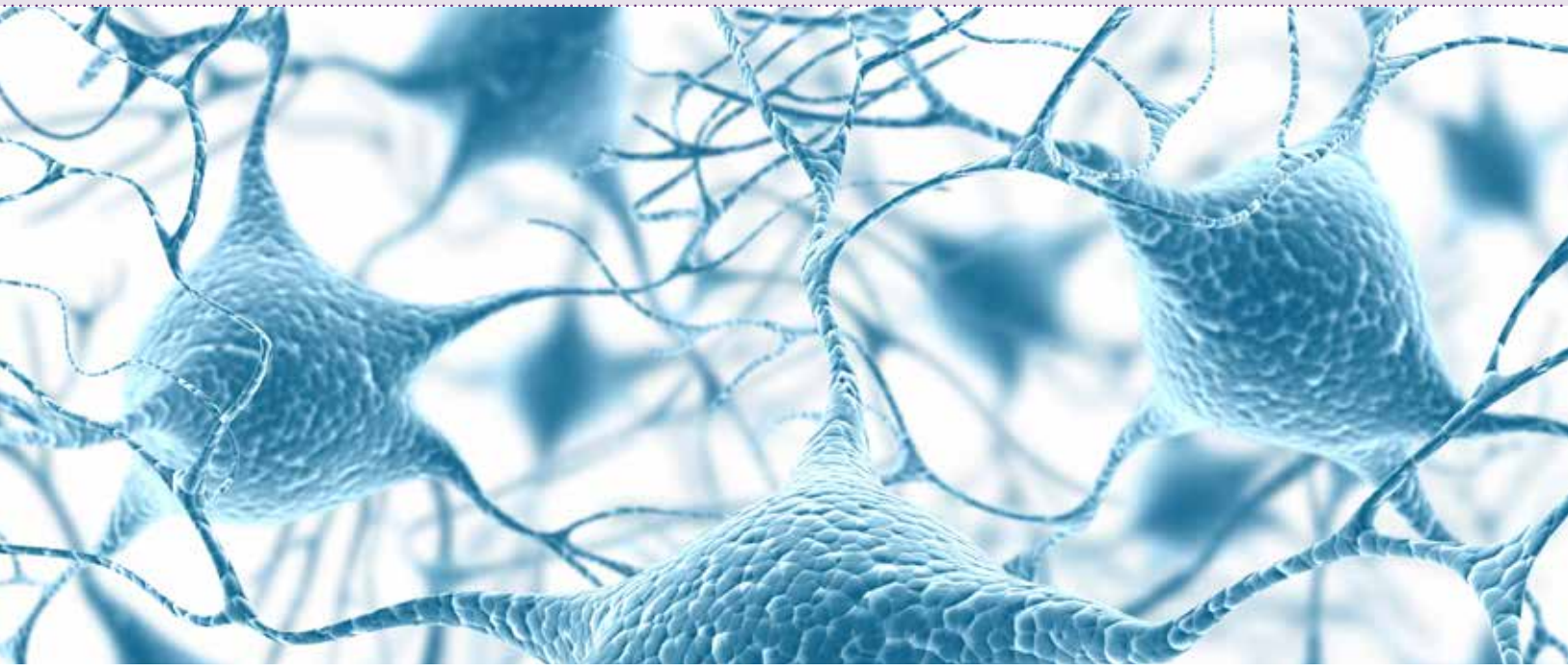

MANAGING THE PATIENT WITH SUSPECTED PERIOPERATIVE NERVE INJURY

Development of a new onset nerve injury following surgery is a dreaded complication for patients, anesthesiologists, and surgeons. Although the rates of occurrence reported in the literature vary, generally persistent neurologic syndromes affecting daily function are rare events. Given the multifactorial etiology of perioperative nerve injury, it is not uncommon for anesthesiologists to encounter patients with this problem throughout their careers. Therefore, it is helpful to plan ahead and develop a strategy to approach the care of these patients before adverse events occur.

RATES OF OCCURRENCE OF NERVE INJURY AFTER REGIONAL ANESTHESIA

While the exact incidence of perioperative nerve injury is not known, there are some consistent themes reported in published studies. One of the most rigorous databases reporting nerve injury after regional anesthesia is the multi-national SOS Regional Anesthesia Hotline Service[1,2]. In one study reported by Auroy and colleagues spanning 10 months of prospectively collected data, 487 of 8,150 anesthesiologists voluntarily agreed to participate[1]. From these participants, 56 major complications were reported out of over 150,000 regional anesthesia procedures (approximately 50,000 of these were peripheral nerve blocks [PNBs])[1]. Among these major complications, the rates of occurrence of nerve injury were reported as 2.5 per 10,000 for central neuraxial blocks (CNBs); of the 12 neurologic complications associated with spinal anesthesia, nine patients reported peripheral neuropathy and three developed cauda equine syndrome[1].

For PNB, there were also 12 reported neurologic complications with the highest rate of occurrence for popliteal sciatic nerve blocks (32 per 10,000)[1]. Posterior lumbar plexus blocks were the only PNB procedures associated with cardiac arrest, respiratory failure, and seizure events[1]. Of the 12 patients who developed neurologic symptoms after PNB, seven went on to report continued symptoms for greater than six months[1]. In a meta-analysis of data collected from 32 studies, Brull and colleagues provide estimates of risk for any neuropathy and permanent neurologic injury associated with CNBs and PNBs[3]. In terms of any neurologic symptoms, the rates of occurrence for CNB and PNB are 0.04% and 3%, respectively[3]. When looking more closely at these data for PNB, the highest rate of occurrence for any neurologic symptoms is with interscalene

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block (2.84%)[3]. For permanent neurologic sequelae, the rate of occurrence for CNB is 0 to 7.6 per 10,000 cases, but the rate for PNB could not be estimated due to only one case reported[3]. This one case came from a series of 520 interscalene blocks reported by Borgeat and colleagues[4]. This article presents the acute and non-acute complications associated with interscalene block, and only one patient continued to report symptoms of nerve injury at nine months post-procedure (0.2% incidence)[4]. An international registry of regional anesthesia procedures established by Barrington and colleagues reports the rate of occurrence of block-related nerve injury as 0.4 per 1000 cases[5].

The insertion of a catheter for continuous peripheral nerve block does not appear to increase the rate of occurrence of nerve injury. In a one-year multicenter prospective study by Capdevila and colleagues involving 1,422 hospitalised patients with a perineural catheter, there were 12 reported adverse events: hypotension (n=3, all posterior lumbar plexus blocks), local anesthetic systemic toxicity (n=2), respiratory distress (n=4, all interscalene blocks), and neuropathy (n=3, all femoral nerve blocks)[6]. All of these complications resolved without long-term sequelae, including one patient who developed a psoas muscle abscess after posterior lumbar plexus block and required intravenous antibiotics[6].

POSSIBLE MECHANISMS OF NERVE INJURY ASSOCIATED WITH REGIONAL ANESTHESIA

Capdevila and colleagues identified certain risk factors associated with higher odds of developing neurologic complications with a perineural catheters: admission to the intensive care unit, age <40 years, and use of bupivacaine instead of other local anesthetics[6]. However, this is only part of the story. The study of needle-to-nerve trauma has been going on for over 40 years[7-9]. Early studies suggested that the use of longer bevel (14°) needles resulted in greater neuronal injury after two hours than shorter bevel (45°) needles with rates of 90% versus 53%, respectively[7]. However, these results have not been reliably reproduced, and one study performed 15 years later showed the opposite results when nerves were evaluated seven and 28 days after injury[8]. Needle-to-nerve contact alone probably does not directly result in nerve damage, and this occurs fairly commonly when traditional blind techniques for regional anesthesia are employed[10]. The use of any nerve localisation technique, including ultrasound guidance, does not influence the rate of nerve injury[11]. Intraneural injection alone may not necessarily cause nerve damage as long as injection pressures remain low, but higher pressures may lead to fascicular disruption[9]. Direct intrafascicular injection leads to consistent and severe nerve injury while minimal nerve damage occurs after intraneural but extrafascicular injections into rat sciatic nerves[12]. In addition, the injectate itself can be a contributor. Common local anesthetics, when injected around nerves (perineural injection), do not result in axonal degeneration[13] but does affect local neural blood flow. The reduction in neural blood flow ranges from 19% with 1% lidocaine plain to 39% with 2% lidocaine plain and 78% with 2% lidocaine compounded with 1:200,000 epinephrine[14]. While there are anesthetic factors contributing to nerve injury, patient and surgical factors also play key roles (Table 1)[15].

A controversial issue is the decision to perform regional anesthesia procedures in patients with preexisting neurologic conditions including diabetic peripheral neuropathy. In theory, the preexistence of neurologic injury (a vulnerable nerve or plexus) may predispose the patient to further injury or a "double crush"[16]. Case reports and retrospective reviews suggest that patients with preexisting neurologic syndromes may have higher than expected rates of unwanted neurologic symptoms after regional anesthesia[17-19]. However, there is no clear evidence to support routine avoidance of regional anesthesia in these patients; a practice advisory from the American Society of Regional Anesthesia and Pain Medicine suggests approaching these situations case by case and carefully weighing the risks and benefits of regional anesthesia for each individual patient[20].

Patient Factors	Increasing age
	Male sex
	Baseline neurologic syndrome or diabetes
	Extremes of body mass index
Anesthetic Factors	Needle-to-nerve trauma
	Vasoconstriction causing nerve ischemia
	Local anesthetic toxicity
	Positioning for surgery
Surgical Factors	Surgical trauma or neurolysis
	Tourniquet use
	Vascular injury causing ischemia
	Perioperative inflammation or infection
	Perioperative hematoma
	Cast or splint compression

Table 1: Factors associated with perioperative nerve injury (adapted from Neal et al)[15].

Recommended Members	Additional Members
Regional anesthesiologist	Physical therapist
Surgeon	Physical medicine and rehabilitation
Pain physician	Quality management
Neurologist	Risk management or legal counsel

Table 2: Members of a local ad hoc perioperative nerve injury review committee

COUNSELING PATIENTS ON THE RISK OF NERVE INJURY

There is sufficient evidence to support the use of regional anesthesia, peripheral and neuraxial, for various surgical indications based on the many reported benefits[15,21]. When addressing the risk of nerve injury related to regional anesthesia procedures with patients, it is important to provide a site- and procedure-specific discussion. Long-term neurologic sequelae are rare and may occur at a rate of 1 in 4,000 cases based on large database studies[2,17]. However, the rate of any neurologic symptoms (not permanent) may be much more common and as frequent as three in 100[21], especially for certain techniques like interscalene block[22]. For my own patients, I explain that it is not unusual to have a patchy area of skin that feels different for a few days even after the clinical effect of the nerve block has resolved, but it is rare for these neurologic symptoms to prevent their ability to take care of themselves.

WHAT TO DO BEFORE NERVE INJURY OCCURS

One of the most important strategies is to plan ahead before a nerve injury occurs. When reviewing the statistics presented already, any moderate- to high-volume regional anesthesia program will experience its share of patients who will experience long-term neurologic sequelae despite providing a high level of care. Prior to performing a regional anesthesia procedure, assess baseline neurologic status in the affected area and document it appropriately. At a minimum, anesthesiology practices that offer regional anesthesia and analgesia for their patients should provide regular daily follow-up until block resolution for inpatients and outpatients[23,24]. Since not all causes of nerve injury can be clearly identified and often cannot be prevented, I recommend creating a local perioperative nerve injury review committee or task force to evaluate these cases when they occur (Table 2). This committee should consist of an anesthesiologist who practices regional anesthesia, a surgeon, pain physician, and a neurologist who can prescribe and interpret nerve function studies and may also include a physical therapist or physical medicine and rehabilitation physician and representative from hospital quality or risk management. The purpose of establishing this committee before nerve injury occurs is to create a "no fault" culture ahead of time, and this committee can meet on an as-needed basis. All participants must agree that nerve injury can be caused by many factors, often combined, and that it does not serve the patient well to point fingers at each other when a nerve injury occurs. Most importantly, first priority should always be to provide the patient with support from compassionate physicians, appropriate diagnostic testing, and therapeutic interventions when indicated.

WHAT TO DO WHEN A NERVE INJURY OCCURS

When a perioperative nerve injury occurs, the treating anesthesiologist should perform a careful history and physical examination focusing on the neurologic system and comparing findings to the baseline pre-procedural examination. In the event of suspected spinal or epidural hematoma, after difficult epidural catheter insertion complicated by postoperative coagulopathy for example, rapid radiologic diagnosis and treatment are needed[25]. Cases of persistent neurologic symptoms without acute change warrant evaluation by the local perioperative nerve injury review committee. If indicated, the patient may need to undergo nerve conduction studies (NCS) and electromyography (EMG)[25,26]. NCS measures velocity, latency, and amplitude of conduction via peripheral nerves and may help to identify the approximate location of focal lesions[26]. EMG can identify patterns of muscle injury related to nerve damage (e.g., fibrillation, abnormal discharges or recruitment)[25,26]. These patterns may also suggest the chronicity of injury (i.e., acute versus preexisting)[25,26]. When performing NCS and EMG, testing bilateral limbs, both affected and unaffected, is recommended and may be useful in identifying systemic disease or central lesions. After baseline testing is performed, and even if abnormal, repeat testing is not usually indicated for weeks to months; patients' progress should be followed clinically[26].

In summary, temporary postoperative neurologic symptoms are not uncommon, but persistent long-term neurologic sequelae attributable to regional anesthesia are rare. Anticipating problems with perioperative nerve injury in advance and establishing a "no fault" culture is preferred over reacting to neurologic complications after they occur. A local perioperative nerve injury review committee can provide objective evaluation of relevant cases and even recommend subsequent diagnostic and therapeutic steps to support patients, their caregivers, and their physicians throughout the recovery process.

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FEATURE

VIEWING REGIONAL ANAESTHESIA THROUGH A BUSINESS LENS

ENABLING THE TRIPLE AIM IN HEALTHCARE

Healthcare is a business. This statement can make clinicians who trained in a paradigm of science and evidence uncomfortable. Even though these may be new and difficult discourses, the reality is that healthcare is one of the largest industries globally. The business of medicine is growing with the realisation of the impact of an aging population (sometimes termed the "grey tsunami"), and complex with the diminishing resources from a struggling global economy. Whether you practice in a public or private healthcare system, there is greater accountability than ever on the clinician to deliver care effectively and efficiently. Institutions around the world are targeting their goals to the "triple aim" in healthcare as described by Berwick[1]. These three goals are aimed at: 1) providing patients with a better experience; by 2) lowering costs; and 3) improving the health of populations.

Regional anaesthesia has the potential to serve many of the objectives of the triple aim. The fiscal reality of increasing costs and decreasing revenues necessitates that any investment in innovation should demonstrate a return on that investment. Positioning success against the goals of an institution is well advised and powerful in demonstrating the potential impact of a regional anaesthesia service.

REALISING THE BENEFITS

Improving the patient experience is perhaps the most important quality measure on any corporate scorecard[2]. Patient experience has been defined as "the sum of all interactions, shaped by an organisation's culture, that influence patient perceptions, across the continuum of care"[3]. The drivers for experience are multifactorial, so it can be difficult to determine where to focus for improvement. Having said that, we know that one of the strongest correlates for patient satisfaction is effective pain control[4]. The analgesic benefits of regional anaesthesia is the principle reason it was introduced to anaesthetic practice.

FEATURE

Regional anaesthesia can provide superior analgesia efficacy and a lower side-effect profile (particularly for the most painful procedures) when compared to the available oral and parenteral alternatives[5].

Whether you practice in a public or private healthcare system, there is greater accountability than ever on the clinician to deliver care effectively and efficiently

Pain control can often be a major determinant of length-of-stay in hospital. Effective analgesia through regional anaesthesia techniques can increase the comfort that patients can be managed at home or in a sub-acute environment[6]. This benefit may be further emphasised in the realisation that the side-effects from the administration of opiates and other analgesia substitutes may in themselves contribute to longer hospitalisations[7]. For some procedures, regional anaesthesia has enabled a transition from multi-night stays in hospital to outpatient procedures[8]. In an age of greater financial accountability, length-of-stay has been identified as a key opportunity for cost savings. Reducing length-of-stay can also further benefit the financial outlook for an institution by improving patient flow, and in turn increase revenues by facilitating the management of higher patient volumes[9].

Clinical outcomes are also emerging as a potential benefit for regional anaesthesia. Orthopedic functional outcomes benefit from early rehabilitation and strengthening, which are both facilitated by good analgesia[10]. Furthermore, we are seeing the emerging interest in the potential that regional anaesthesia may decrease cancer recurrence rates, based on hypotheses of reducing the neuroendocrine response and modulating lymphatic flow[11,12]. While this area of research is in its infancy, the pilot evidence and theories can certainly be leveraged to surgeons and administrators for their support of a regional anaesthesia program.

The intangible benefits of regional anaesthesia should also not be ignored. Regional anaesthesia can enable the appreciation that an anaesthetist is more than an "operative technician", and instead should be regarded as a perioperative physician. As a perioperative physician, the anaesthetist is regarded as a healthcare provider who is intimately involved with a patient throughout their experience[13]. Most anaesthetists meet their patients for the first time outside an operating room, and end their care with a handover in the recovery room. Instead, imagine the impact we could make if our care stretched well into both the preoperative and postoperative periods.

By stepping out of the operating theatre and going "beyond the mask", the profile of the specialty moves from a supportive role in the system, to a leading one for transformation

As perioperative physicians, we can meet even the healthiest of patients preoperatively to explain a potential block and set appropriate expectations. Following surgery, we follow patients both in-hospital or out-of-hospital for their pain management, but also other concerns that are discussed by patients who have developed trust and a relationship with their doctor. The anaesthetist, by serving as a perioperative physician, can serve as a bridge between the surgeon, rehabilitation physicians, and primary care providers to smooth the transitions of care that we know are critical for healthier populations and the prevention of costly readmission[14]. By stepping out of the operating theatre and going "beyond the mask", the profile of the specialty moves from a supportive role in the system, to a leading one for transformation[15]. With demonstrable leadership, to paraphrase Michael Enzi, we can better ensure our specialty is at the table of healthcare reform as opposed to potentially being on the menu.

UNDERSTANDING AND MITIGATING RISKS

A well-articulated discussion of any innovation should also acknowledge the risks for success. Without a balanced appreciation of the threats against the expressed benefits, any stakeholder will be less confident that a business case has been well represented.

When successful, the side-effects of regional anaesthesia may be minimal compared to the oral or parenteral alternatives, but the upfront potential complications associated with the procedure should not be ignored. Haematoma, infection and nerve injury are all reported complications for which patients should be aware, regardless of the infrequent incidence[16]. As we are all aware, depending on the type of block and site of the technique, the occurrence of any of these complications could lead to significant morbidity. High quality technical expertise with appropriate aseptic techniques can significantly mitigate these risks.

Ironically, one of the known risks associated with regional anaesthesia is a consequence of how effective it is in relieving pain. Pain has been described as a protective mechanism to prevent further injury in the presence of noxious stimulus. By completely removing the perception of the noxious stimulus, regional anaesthesia has the potential to make patients overconfident postoperatively. As such, patients may compromise their repairs and replacements by being too aggressive in their rehabilitation or overestimating their strength for different activities, including walking, which could result in falls[17]. Good communication with patients and the postoperative rehabilitation teams, as well as innovations in selective nerve block techniques can significantly mitigate these risks[18].

The introduction of ultrasound to the regional anaesthesia has been a game changer. The ability to image nerves has improved confidence in the ability to perform blocks successfully, making this anaesthetic practice accessible to more anaesthetists. There has been huge growth in regional anaesthesia enthusiasts, which is important in developing the critical mass that is necessary to consistently offer this service. One can imagine that if we are universally successful in marketing the benefits of this service to all stakeholders, those efforts would be undermined if we were then unable to dependably offer the service.

The anaesthetist, by serving as a perioperative physician, can...bridge between the surgeon, rehabilitation physicians and primary care providers to smooth the transitions of care... critical for healthier populations and the prevention of costly readmission

Interestingly, the exponential growth in anaesthetists performing blocks as a result of ultrasound, is also a potential threat. Regional anaesthesia is a procedural skill that requires knowledge of the equipment being used, image acquisition and interpretation, and the psychomotor skills to handle a probe and appropriately needle structures. Achieving competency in any technical skill requires knowledge, practice (ideally not on patients), and coaching to improve performance. The incidence of block failure, and the complications described above, are significantly reduced with the expertise that comes with adequate training. Formal training through fellowships can help develop faculty with mastery of these skills and build further capacity for training opportunities[19]. As a profession, we must facilitate access to training opportunities to guarantee safety and strive to deliver this service at the highest quality[20].

Finally, the biggest threat to administrators, and the biggest annoyance to our surgical colleagues is the impact regional anaesthesia can have on the flow and efficiency through the operating theatres. Even though regional anaesthesia may benefit cost by decreasing length-of-stay, hospital budgets are often compartmentalised, and operating theatres represent one of the costliest portfolios. Proficient regional anaesthetists, surgeons and nurses can help to significantly contain costs and enhance revenues[21].

The introduction of ultrasound to the regional anaesthesia has been a game changer

However, for most administrators and surgeons, the analgesic benefits of regional anaesthesia alone will not outweigh the opportunity to add an extra case with oral/parenteral alternative. Even for the most skilled regional anaesthetist, speed in performing a block could compromise quality, and annul the important training opportunities discussed above. The best mitigation strategy that would preserve quality and training, and perhaps even improve operating theatre efficiency, is the investment in a dedicated space to perform regional techniques (ie. block room)[22]. In these spaces, blocks can be performed in absence of duress from surgical colleagues, and allow enough time to properly communicate with patients, while also facilitating the training of future regional anaesthetists[23]. 'Block rooms' can require the investment of space, personnel and equipment, but are the best resource to realise all the potential benefits of this service, including potential fiscal returns on the investment.

MAKING YOUR PITCH

Understanding the benefits of regional anaesthesia and having answers that mitigate the potential risks to a program is essential when presenting to decision makers. Success is dependent on the ability to communicate in the language of the hospital administration and aligning with their goals. Avoiding the 'scientist' tendency of presenting 100 page 'thesis', and instead summarising the key issues in a clear, concise and coherent 1 or 2-page executive summary is ideal. If provided an opportunity to present, leave decision makers with three to five clear asks and recommendations to consider, which are anchored against the goals of the organisation. By convincing stakeholders to make the necessary investments for a comprehensive service, we are well positioned to be able to offer a consistent and high quality product to our patients. Oscar Wilde gave us the best advice when making a pitch in stating, "you never get a second chance to make a first impression".

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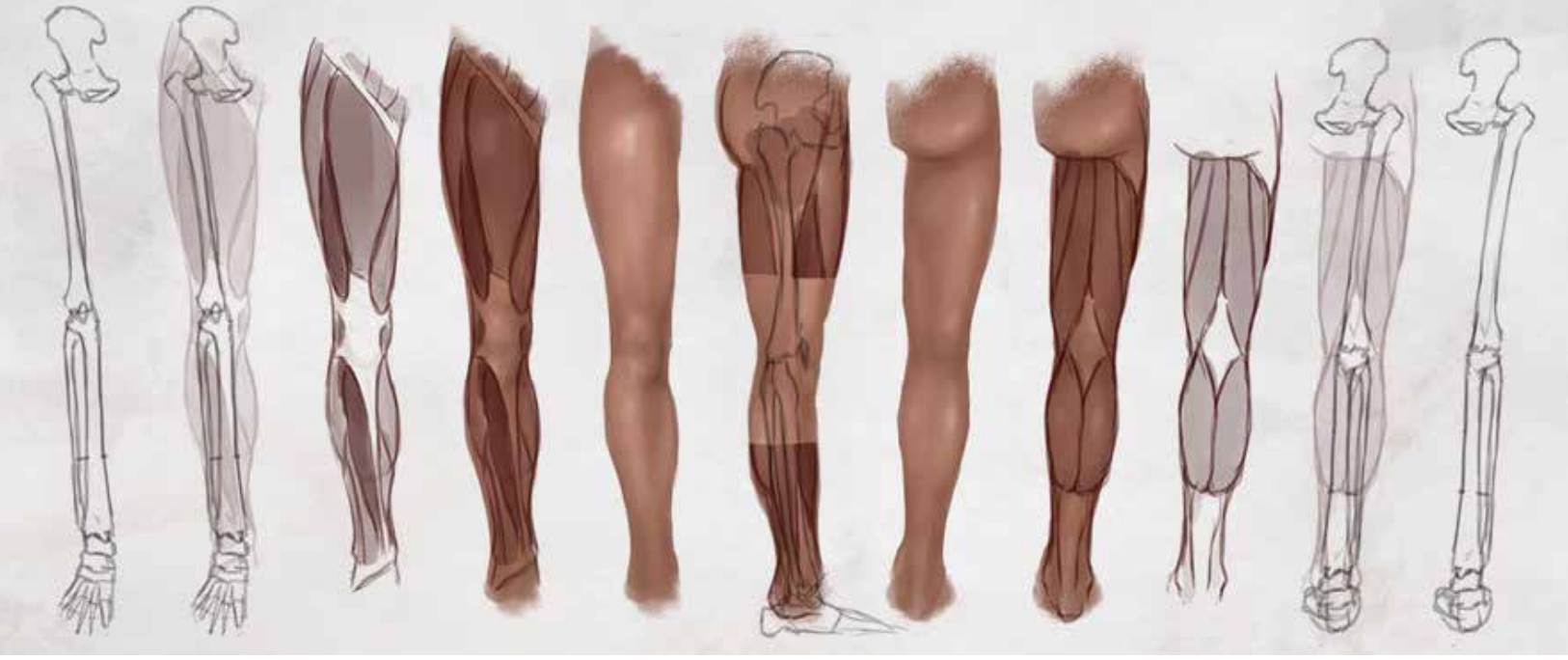

THE ADDUCTOR CANAL BLOCK

Optimising analgesia for total knee replacement was a hot topic at ASURA 2017. Arthroplasty is a growth industry in the first world, and contributing to the pathway is part of anaesthesia core-business.

A number of institutions and organisations have published perioperative management protocols in support of enhanced rehabilitation programs. The goal being early ambulation and progressive functional recovery, not limited by pain or side-effects.

Benefits of a successful analgesic program include:

- Enhanced quality of recovery
- Safe, early ambulation and discharge
- Minimisation of opioid side-effects
- Decreased opioids in the community
- Reduction of progression to persistent postoperative pain

RECOMMENDED TECHNIQUE FOR KNEE REPLACEMENT ANALGESIA

A combination of neuraxial blockade, local infiltration anaesthesia (LIA), perioperative nerve block and multi-modal oral analgesics was recommended by Prof. Ed Mariano, invited speaker to ASURA 2017. Block of choice at the Veterans Affairs Palo Alto Health Service, where he is Chief of Anesthesiology, was the Adductor Canal Block (ACB).

Classic femoral nerve block will provide similar analgesia but is associated with limitations to mobilisation.

Sample Multi-Modal Protocol:

PREOPERATIVE

- Insertion of an Adductor Canal Catheter
- Single dose gabapentin 300-600mg

INTRAOPERATIVE

- Spinal anaesthesia with no long-acting opioid
- Paracetamol 1g
- Local Infiltration Analgesia by surgeon (0.2% ropivacaine with adrenaline 1mg per 200ml plus ketorolac 30mg). Administer max 150ml in divided injections to posterior capsule, retinacular layer and skin.

POSTOPERATIVE

- Regular paracetamol plus NSAID (if not contraindicated)

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- Regular slow-release opioid
- Oral oxycodone IR prn as back up
- Continuous Adductor Canal Infusion (ropivacaine 0.2% 6ml/hr with 5ml bolus, 30 min lockout)

(Webb C, Mariano E, Pain Manag (2015) 5(3) 185-96).a

ANATOMY OF THE ADDUCTOR CANAL

The ACB is a straight-forward nerve block, usually with ultrasound guidance, that is quick and easy to perform. The aim is to place a catheter adjacent to the femoral artery, beneath Sartorius, at the mid-thigh level.

Figure 1: Surface anatomy of the right thigh as delineated by ultrasound examination. The medial borders of the Sartorius (dotted line) and adductor longus muscles (broken line) have been mapped distally to their intersection at the apex of the femoral triangle.
A corresponds to a sonographic plane at the apex of the femoral triangle. B corresponds to a suggested ideal local anesthetic injection site in the mid-adductor canal. C corresponds to the distal end of the adductor canal at the level of the adductor hiatus.
(RAPM 2016 Vol41,3,may-June p 325).

There is a little bit of academic controversy about the exact anatomical boundaries of the adductor canal (AC). The true AC comprises the portion enclosed by the vasoadductor membrane and is quite distal in the thigh, originating close to the origin of vastus medialis. The functional AC (also known as the subsartorial canal, 15 to 20cm below the ASIS) is more proximal and is a better place to perform the block. Spread of local anaesthetic is predominately distal, into the true AC, blocking the nerve to vastus medialis, which provides a significant contribution to knee innervation. Sub-sartorial LA injection also spares the nerves to rectus femoris and vastus lateralis, resulting in improved quads strength and balance, when compared to the traditional femoral nerve blockade.

OUR APPROACH TO PERFORMING ACB

The group most likely to benefit from ACB are knee replacement patients, for whom a minimum 2 to 3 day continuous infusion is of benefit. For lesser knee procedures (ACL reconstruction, patella stabilisation etc) a single-shot technique is adequate. It is opioid-sparing and can improve early postoperative recovery.

As with all peripheral nerve blocks aseptic preparation of equipment, mask and sterile gloves and a clean limb should be standard. If placing a catheter, our practice is to also use a sterile probe cover and a field drape. We usually place the adductor canal catheter (ACC) for knee arthroplasty patients immediately after performing the spinal, and use a combined setup to include the ACC equipment.

Figure 2: Studentdoctor.net

Trolley would comprise:

- Field drape with window
- Galley pots x2
- Kidney dish for sharps
- Syringes / Needles / Gauze swabs
- Spinal needle / spinal LA / Spinal opioid (Fentanyl) available
- LA for skin
- 100mm Plexolong catheter kit (Pajunk)
- Dermabond / LockIt / Tegaderm
- Probe cover and sterile jelly
- Sterile drug labels

We recommend performing a mini 'stop before you block' routine that ensures the ultrasound screen is positioned on the contralateral side, and the trolley and doctor on the operative side. It helps things move more smoothly if you get an assistant to prep the thigh with a chlorhexidine swab-stick, keeping the sterile trolley free from potential contamination.

The window of the field drape is placed over the mid-thigh. It is important to choose an entry point that will keep the catheter out of the operative field. Under the tourniquet is ideal, as it is difficult to protect during the knee replacement and is vulnerable to dislodgement at surgical un-draping if left exposed on the thigh.

For surgeons who use a high tourniquet, it may be necessary to approach the canal from a slightly oblique angle, that effectively tunnels the catheter to the correct position but leaves the insertion point fairly proximal.

Mix 10ml of ropivacaine 0.75% with 10 ml saline in a labelled pot on the trolley to give 20ml of injectate. Using a sheathed linear probe set to 4-5cm, identify the

femoral artery in the upper thigh and follow it as it passes from lateral to medial beneath Sartorius. Start the needle insertion 3 to 4cm lateral to the probe edge to allow for a shallow approach and some "tunnelling" prior to reaching the target. Aim for a point just anterior to the hyperechoic neural structures that are visible lateral to the artery near the mid-point of the muscle ('keel' position). After confirming needle tip position, inject 10 to 15ml LA above the saphenous bundle with spread superiorly over the artery. Hydro dissection to create a pocket beneath Sartorius is the goal of the initial injection.

A catheter will feed easily into this space with similar resistance to a correctly-placed epidural. It often passes medially, over the artery, in the direction of the adductor muscles. Once advanced to 12-15cm at the skin, withdraw it slowly, using ultrasound visualisation if possible, until the tip is just lateral to the artery, but under the sartorius. We use a Plexolong 100mm kit and find that it aids visibility to leave the wire-guide in place while withdrawing, If the tip is not obvious, it is better to err on the slightly long side, rather than withdraw too much.

Often the catheter finishes about 7-10 cm at the skin if positioned correctly. Less than 7cm is associated with leakage and displacement.

Prior to securing the catheter (we use dermabond and Lock-It), inject the remaining 5ml of local to confirm patency. A pulse-injection technique with colour Doppler activated on the ultrasound will assist with confirmation of tip position.

Intravascular placement is a potential safety risk with adductor canal blockade. The femoral vein can be quite variable in its position and often sits infero-lateral to the artery. 'Bouncing' the probe prior to needling will help identify this compressible structure and allow for optimal angle of approach. Similar to epidural infusion management, the adductor catheter should be aspirated to test for intravascular placement prior to initiating the infusion or administering a bolus.

The dressing is important to get right to reduce risk of dislodgement. We recommend use of two large clear dressings for the catheter site, plus one in addition to cover the filter to keep it water resistant.

Postoperatively the catheter is connected to a portable pump for ongoing infusion. The standard duration currently is for three days. Local audit supports extended infusion up to five days in selected patients (those with rebound pain on cessation of infusion). Continuing the infusion at home is safe and feasible, but requires good support systems and clear patient instructions.

Dr Steve Watts and Dr Mark Lennon
Nedlands, WA

Figure 3: Dressing, two large clear dressings for the catheter site, plus one to cover the filter to ensure water resistance.

Further Reading:

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NSC 2017 SPEAKER ABSTRACTS

A/PROF. MARJORIE P. STIEGLER | MD

Associate Professor in Anesthesiology, University of North Carolina at Chapel Hill, United States. Board of Directors, Anesthesia Patient Safety Foundation.

MEDICAL DECISION MAKING: EXPERTISE AND ERROR

How is it that clinicians acquire medical expertise? Why is it that those who have acquired expertise continue to make diagnostic and therapeutic error, such that medical error is considered to be among the leading causes of death? Basic principles of human cognition may explain how the very same cognitive processes that hallmark expertise are also the source of medical error. These principles include the concepts of knowledge acquisition in medical education, dual-process cognition (fast/intuitive vs slow/analytical), cognitive load theory, illness scripts, bias and heuristics, and sense-making.

Medical education is accomplished via three general modes of exposure to information: personal experience, vicarious experience, and semantic exposure. Exposure or experience does not necessarily ensure that information will be consolidated into memory and therefore available for subsequent retrieval. Memory is influenced by a variety of factors, which vary among individuals exposed to the same information. As well, the quantity of information present in any situation overwhelms the cognitive ability to actively process and hold in conscious thought. Cognitive load theory tells us that, on average, the human mind can pay attention to and store in short-term working memory only about 3-5 data items. Because the quantity of available data present exceeds that which can be consciously acknowledged and held in working memory, allocation of attention becomes important. Which data are most important? What should we pay attention to right now, and where should we seek to allocate attention in the immediate future? Although these questions are generally not consciously considered, they nonetheless guide data gathering, data synthesis, critical appraisal of data, and the resultant diagnostic or therapeutic medical decisions. This occurs in both intuitive and analytical cognitive processes, but is less tangible and less accessible to the conscious mind in intuitive processes. Why is that so? Because the experience of being unsure – of not knowing the answer at all, or knowing that there is some uncertainty about the provisional answer – is qualitatively much different than the experience of believing to know an answer with certainty. It is possible, of course, to make error in either scenario. Depending upon context, different strategies will be required to minimize the risk of medical error[1-4].

ANAESTHESIA AND SOCIAL MEDIA

Patients turn to the internet for instant information and answers. This is true of complex medical questions, as with more mundane topics. The physician voice is lacking online, and patients are much more likely to obtain information from sources that are incorrect and dubious at worst, or non-scholarly anecdotes at best. Why is this the case? In part, because patients do not usually have access to primary literature behind a paywall (i.e., for subscribers only) – and may not be able to make easy use of that literature even if it were readily available. A bigger contributing factor, however, is the basic nature of how search engines respond to online queries, and what algorithms are used to present information to those who are searching. Physicians are abysmally slow adopters of technology and activities that result in highly visible, high quality content available to patients where they are seeking it. This professional imperative is but one of many powerful reasons that physicians should be engaging with digital platforms, including social media.

AFTERMATH OF ADVERSE EVENTS: CARING FOR THE CAREGIVER

Anesthesiologists save lives, and collectively, share the very abnormal experience of interfacing with death and serious trauma that most humans will never encounter. Individuals will vary in their post-event experience: some will find their concentration and judgment impaired, and others will have that same impairment but lack the insight to detect it, and others will have lesser degrees of impact, and some will have none at all. Several factors may play a role in the experience of post-event distress

or trauma, such as whether an error was made, whether the event was thought to be preventable, whether the bad outcome was expected or at least within reasonable probability, the mechanism of the event (such as criminal assault or terrorism), and so on. Depending upon the institutional culture, it is very likely that physicians and other clinicians will not have their own well-being prioritized after catastrophic events, but instead face production pressure to get back to work as usual, and quickly. Physicians surveyed about catastrophic events in their professional work often endorsed experiences that are similar to major depression or post-traumatic stress disorder. A large percent report needing weeks, months, or even years to fully recover, and many consider leaving medicine altogether. Support is needed for clinicians. We must not ignore or marginalize these post-event experiences. Instead, we must find ways to take care of our own, for our good and the good of our future patients[5-7].

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SESSION TIMES

Medical decision making: expertise and error

Sunday 8 October

Riverside Theatre

0800–0930

Anaesthesia and Social Media

Saturday 7 October

Riverside Theatre,

1315–1445

Aftermath of adverse events: caring for the caregiver

Saturday 7 October

Meeting Room 3

1530–1700

Communication failure and medical error

Sunday 8 October

Riverside Theatre

1515–1645

NSC 2017 SPEAKER ABSTRACTS

PROF. MICHAEL AVIDAN | MBBCH, FCASA

Dr Seymour and Rose T. Brown Professor of Anesthesiology at Washington University, St Louis, United States. Director of the Institute of Quality Improvement, Research and Informatics, Division Chief of Cardiothoracic Anesthesiology.

THE CRISIS OF REPRODUCIBILITY IN SCIENTIFIC RESEARCH

To progress, science needs both innovation and self-correction. There has typically been too much emphasis on the former, and little energy devoted to the latter. Many published scientific studies are found to be irreproducible. There are specific reasons for this reproducibility crisis, which should be systematically addressed. The three pillars of reproducibility are (i) methods, (ii) results, and (iii) inference. The current academic reward system does not sufficiently incentivize rigor and reproducibility practices. For example, positive results are typically rewarded more than null or negative results. The bar for claiming statistically significant success is stubbornly set at an unreasonably low level, which facilitates the proliferation of false positive findings. Furthermore, the key stakeholders in science do not have aligned incentives. Some solutions are more obvious, and are currently being implemented, including registration, publication of protocols, and data of sharing. Much can be done to address the crisis in science by realigning incentives, by creating a culture of open research, by attempting to counter positive publication bias, and by overhauling the creaking peer-review system.

GRANDPA'S BRAIN: IS IT AT RISK FROM HAVING ANAESTHESIA?

There is a widely held view, both within the medical community and within society more broadly, that general anaesthetic agents are neurotoxic, and that general anaesthesia carries a cognitive cost. Despite compelling evidence suggesting that this is very unlikely to be true, perceptions persist. It is true that postoperative delirium and cognitive decline lasting weeks after surgery are common occurrences. It is also likely to be the case that these complications are associated with worse long term outcomes. However, the pathophysiology and aetiology of these neurological complications remains obscure, and there are no proven preventive measures. It is also probable that an appreciable number of surgical patients suffer from covert perioperative strokes, but determining the full extent and implications of these requires targeted investigation. A growing corpus of evidence suggests that general anaesthesia is not neuro-toxic, and that neither surgery nor general anaesthesia carry a long-term cognitive cost. Indeed, it is even possible that some surgeries, such as those that alleviate pain and inflammation, are associated with relative cognitive improvement.

PREVENTION OF INTRAOPERATIVE AWARENESS: FROM NEUROBIOLOGY TO CLINICAL PRACTICE

Intraoperative awareness with postoperative explicit recall can be especially distressing and is frequently associated with symptoms of posttraumatic traumatic stress disorder. A large number of patients experience awareness during intended general anaesthesia, but the overwhelming majority do not subsequently remember that they were aware. Most distressing awareness episodes have been associated with pharmacological paralysis, suggesting that minimization or avoidance of neuromuscular blocking agents could be an effective preventive approach. Interestingly, awareness with recall is likely to be more common with propofol total intravenous anaesthesia than with ether-based volatile anaesthetic agents. Importantly, many patients who have regional anaesthesia or sedation complain of distressing awareness. This could mean that patients' expectations are often not appropriately calibrated. Most patients who have experienced awareness do not spontaneously report their experiences, such that the majority of awareness episodes are undetected. Simple protocols, incorporating alerts for low volatile anaesthetic concentration or incorporating electroencephalographic brain monitoring, might be effective in decreasing the incidence of awareness with recall.

READING THE MIND DURING ANAESTHESIA: THE ALPHA, BETA AND DELTA OF ELECTRO-ENCEPHALOGRAPHY

The brain is the target organ of general anaesthesia. Yet, although anaesthetists are strongly focused on patient safety and monitoring, the brain has been relatively neglected, especially compared with the cardiorespiratory systems. Since 1937, scientists have investigated electroencephalographic (EEG) changes that occur with various anaesthetic agents in different patients. Even using a limited frontal EEG montage, specific features can be discerned that are typically seen during sleep and general anaesthesia. Specific oscillatory patterns, especially with dominant slow delta waves and faster theta/alpha spindles, reflect functional thalamocortical networks that are likely to be needed for sleep and general anaesthesia. With excessive anaesthesia, the EEG has periods of suppression, which occurs at lower anaesthetic concentrations in those who are sensitive to anaesthetic agents. The effects of anaesthetic agents on the brain differ according to the properties of drugs administered and patient factors such as age and diseases. Drugs like volatile agents, propofol and ketamine all have distinct and different EEG signatures. Processed EEG indices have been developed to guide titration of anaesthesia, but currently these indices are error-prone, and might have had the unfortunate untoward consequence of preventing anaesthetists from learning about the EEG and changes with anaesthesia. An important weakness of both processed and unprocessed EEG is that the EEG is vulnerable to extra-cranial electrical artifact, which can be difficult to distinguish from electrical signals arising in the brain. In future, EEG measures of connectivity might provide additional information about the brain during different states of consciousness and unconsciousness. It is also likely that EEG indices during surgery will be patient specific, and will incorporate details on patients and drugs, and might also utilize sophisticated machine-learning algorithms.

SESSION TIMES

The crisis of reproducibility in scientific research

Saturday 7 October

Riverside Theatre,

1030–1200

Grandpa's brain: is it at risk from having anaesthesia?

Saturday 7 October

Riverside Theatre

1530–1700

Prevention of anaesthetic awareness: from neurobiology to clinical practice

Sunday 8 October

Riverside Theatre

1515–1645

Reading the mind during anaesthesia: the Alpha, Beta and Delta of EEG interpretation

Monday 9 October

Meeting Room 1&2

1530–1630

NSC 2017 SPEAKER ABSTRACTS

PROF. DAVID STORY | MBBS MD BMEDSCI FANZCA

Professor and Chair of Anaesthesia. Head of Anaesthesia, Perioperative and Pain Medicine Unit (APPMU). Director, Melbourne Clinical and Translational Sciences (MCATS) research platform. The University of Melbourne.

WOT I LEARNED IN BOOKS

Reading beyond the medical literature can give insights into everyday clinical practice as well as academic anaesthesia. I want to look at three (non-fiction) books that provide insights that can help our day-to-day work.

Book One

The first book, *Outliers*, examines the factors that contribute to high levels of success. The first of two particular points are that the idea of the "natural" is largely false and that expertise for most of us takes a lot of time and hard work (famously 10,000 hours). The second point is the connection between equality, confidence in speaking up, and safety. Australian egalitarianism contributes to the excellent safety records of QANTAS pilots and ANZCA anaesthetists.

Book Two

The second book, *Superforecasting*, examines what makes people good at predicting. The elements this book identifies that make people good forecasters (based on intensive psychological research funded by US intelligence) also make good anaesthetists. Importantly, many of the traits can be acquired or developed. Some important traits good forecasters (anaesthetists) have, include that they: appreciate their limits, blend diverse views into their own, think probabilistically, are not wedded to particular ideas, and can change their minds. As we move increasingly to multi-disciplinary care of complex patients these kinds of traits are important for patient care, as well as research and teaching.

Book Three

The third book, *The Naked Surgeon*, is not about surgeons' love lives. Rather it is fundamentally about measuring important outcomes against estimated risk in medicine (with cardiac surgery as the example) and transparency with outcome results. Again these are approaches we can all learn. An added bonus is that the book includes a number of my favourite jokes about cardiac surgeons. The book starts and ends with suppression of adverse results at Bristol Infirmary in the UK. The final part is an essay from Steve Bolsin about the Bristol baby scandal which is a must-read that should considered with self-reflection on "what would I have done?"

Books

This is NOT like book club; I will assume the audience have not read the books.

1. Outliers: The Story of Success. Malcolm Gladwell. 2008.
2. Superforecasting: The Art and Science of Prediction. Philip Tetlock and Dan Gardner. 2015
3. The Naked Surgeon: the power and peril of transparency in medicine. Samer Nashef. 2015

SESSION TIMES

Frailty: do you really know it when you see it?

Saturday 7 October

Riverside Theatre,

1530–1700

Wot I Learned in Books

Sunday 8 October

Riverside Theatre

0800–0930

Perioperative diabetes: hitting the sweet spot

Monday 9 October

Meeting Room 1&2

1030–1130

DR PHILIPP LIRK | MD, MSC, PHD

Anesthesiologist at Brigham and Women's Hospital Boston and Member of the Faculty at Harvard Medical School.

BIG DATA – THE REVOLUTION AND WHAT IT MEANS FOR THE ANAESTHETIST

Over the past two decades, digital technology has penetrated virtually every aspect of daily life, and Medicine has been no exception. It has changed the way people socialize, work and interact. This lecture will point out the ways in which digitalization has the potential to change Medicine, and Anaesthesia in particular.

Big Data is by definition an amount of data which cannot be analyzed any more by traditional spreadsheet methods. Big data therefore depends on adequate computing power, and advanced analysis methods. Another prerequisite for Big Data is the digitalization of human life. This means that information on countless activities, or, to remain within the medical sector, patient data, is stored digitally at unprecedented levels. Modern hospital-wide electronic health records (EHR) store diagnoses, vital signs, and interventions. For the perioperative period, all medications, vital signs, and procedure records can now be retrieved for millions of patients.

This opens up many possibilities. First, sharing the data between health care providers might become easier, but in reality, the fragmentation of the market between several EHR systems which are incompatible with each other in the direct exchange of data has precluded the full potential to be realized. Second, data can be analyzed to provide quality control and to guide quality improvement programs. When automated routines are introduced, digital data can be used to provide near-real-time feedback to health care providers. Thirdly, the sheer amount of patient data accessible has led to a new array of research techniques such as registry trials and retrospective investigations comprising tens or even hundreds of thousands of patients, which have the potential to complement traditional clinical trials.

Some caveats that limit the interchange of data are the fact that no uniform data format exists, every specific software has its own design and coding. So to enter data into a national or international database, data needs to be adapted and reprogrammed. Second, the quality of analyzed data depends on the quality of the original data input. Third, analysis of data such as vital signs requires that the data be filtered and double-checked adequately. Finally, since retrospective analysis can prove association, but not causal relationships, researchers should try to resist the temptation to perform "data mining" and should rather adhere to classic research protocols, with pre-defined hypotheses and analysis.

Within these limitations, Big Data analysis has the potential to become a vital tool for Medical Scientific inquiry in the 21st century. The sooner Anesthesia embraces this new technique the better our specialty will be equipped for the future.

SESSION TIMES

The big data revolution & what it means for the anaesthetist

Saturday 7 October

Riverside Theatre,

1030–1200

Epigenetics: a new research field with perioperative implications

Sunday 8 October

Riverside Theatre

1015–1145

Chest injury: a difficult pain problem

Sunday 8 October

Riverview Room 4

1515–1645

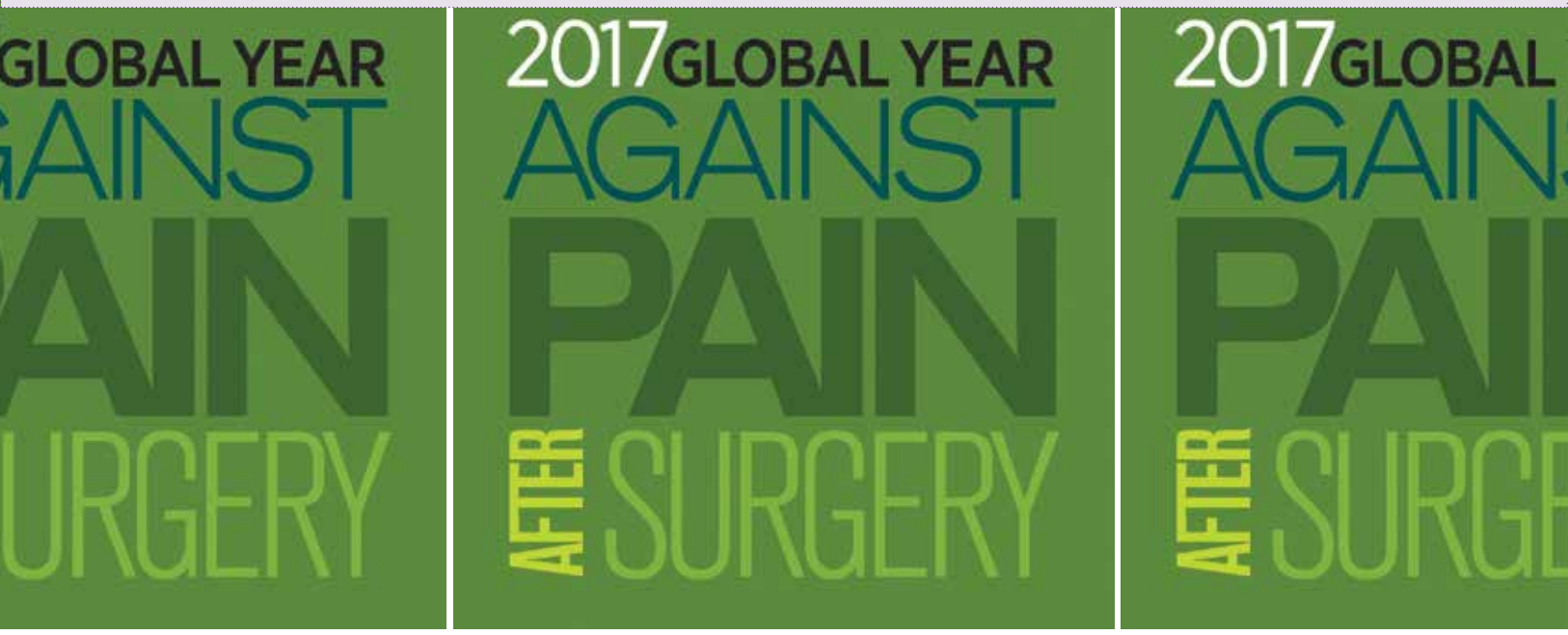
Regional anaesthesia and cancer recurrence: what is the current evidence base?

Monday 9 October

Riverside Theatre

1045–1215

FEATURE



2017 GLOBAL YEAR AGAINST PAIN AFTER SURGERY

The International Association for the Study of Pain (IASP) launched the Global Year Against Pain after Surgery in January 2017, writes Drs Amanda Baric and Roger Goucke.

Pain after surgery is a condition that anaesthetists manage on a daily basis. Over recent decades we have seen a shift in the approach to postoperative pain. We once considered postoperative pain as something that is inevitable and to be expected, now we recognise pain as something that can be treated using a multimodal and collaborative approach. Our surgical colleagues have worked hard to improve techniques and increase the use of minimally invasive surgery whenever possible. We have seen an increased awareness of the need to mobilise patients and restore function, leading to the need for better pain management strategies to facilitate this.

Many of us have engaged in learning new techniques to control pain, including pharmacological, non-pharmacological and regional anaesthesia.

Our Australasian anaesthesia and pain colleagues have led the way in postoperative pain management. The publication of *Acute Pain Management: Scientific Evidence* was ground breaking in the management of acute pain, which includes postoperative pain. This publication is now in its 4th edition and continues to be a fantastic resource for clinicians involved in treating acute pain globally.

We now routinely accept that assessment of postoperative pain includes age and developmentally appropriate tools for measuring severity as well as function. Our understanding of the requirement to assess pain on movement and treat incident pain has helped us to better mobilise our patients and return them to their homes sooner.

Poorly treated acute postoperative pain impairs respiratory, cardiac and metabolic function as well as increasing distress, including emotional and psychological elements. It also interferes with sleep, impairs mobilisation and rehabilitation and will increase the risk of persistent postoperative pain. Pain can increase the risk of thrombosis, delirium and mortality. As perioperative physicians, we have a great interest in reducing pain and its complications.

The IASP recognises the importance of all health care providers in treating postoperative pain. Please consider engaging your patients and colleagues in the Global Year Against Pain after Surgery. Visit the IASP website, which has a large number of useful information sheets www.iasp-pain.org/globalyear.

REGULAR

WHY YOU SHOULD AVOID OFF-THE-PLAN APARTMENTS (AND NEW HOMES/ TOWNHOUSES) LIKE THE PLAGUE

I'm sure you have seen the glossy ads espousing various benefits such as stamp duty savings, rental guarantees, discounts and incentives, state-of-the-art gyms, beautiful kitchen appliances, a concierge and the list goes on. As the title of this article suggests, I strongly believe that off-the-plan apartments do not make good investments. And I put new-build townhouses and houses in the same boat. Stuart Wemyss from ProSolution tells us why…

THE THREE FUNDAMENTAL PROBLEMS

There are three fundamental problems with off-the-plan (OTP) apartments. The sheer existence of these problems means that these assets cannot provide good investment returns.

1. Most people appreciate that land typically appreciates in value over time, and buildings depreciate in value (due to wear and tear – a building cannot last forever without maintenance and refurbishment). Therefore, if you are investing in property primarily for capital growth (and you should), you need to invest in properties that have a strong land value component (i.e. >50%). Even an apartment has an attributable land value component (more further on). OTP apartments tend to have a land value component of less than 10% of its overall value. So, in this situation, 90% of your property is depreciating and only 10% of your property is appreciating. There's just not enough appreciation in value to offset the depreciation.
2. The goal of investing is to achieve the highest return for the lowest risk. However, many people erroneously chase the highest return without any regard to risk – that's just plain silly. Would you like to invest in a property that has a 90% probability of delivering 8% p.a. capital growth over the next 30 years or a property that has a 50% probability of delivering 10% growth? Most people would correctly opt for a lower growth rate to dramatically reduce their risk. This is the problem with OTP apartments; there's no proven track record of performance. However, with an established property you can see what it's been bought and sold for over, say, the past 30 years. This has two advantages; firstly, you can assess its past growth rate – which is useful because it provided evidence that the property opposes the correct fundamentals; and secondly, you can use this information to assess its current value. However, with an OTP apartment, you have nothing to compare it to. The developer sets the price and that price includes all the cost of marketing the property, providing rental guarantees, their profit and so on. Also, you have no reliable way of assessing the apartments future growth prospects.
3. Why are red diamonds 150 times more valuable than normal diamonds? Simply because they are so rare. Scarcity is important with property too. The architectural style needs to be scarce – for example, no one is building Victorian cottages or art-deco apartments anymore. Also, land supply needs to be scarce too (i.e. the availability of vacant land within say a 20km vicinity of the property). OTP apartments have virtually no scarcity. They are typically in a block of hundreds of apartments that all look the same. In this situation, it is the vendor who drops their price first who gets the sale!

In summary, OTP apartments have little land value, no proven performance or a way of assessing their market value and no scarcity. As such, their long-term capital growth prospects are minimal at best.

In addition to the above, some other concerns include the fact that you cannot inspect the completed property before you buy it. Walking through a property is a totally different experience than looking at plans and viewing a display suite. You can't assess the size, level of natural light and so on. Secondly, construction contracts can give the builder the ability to change or substitute certain items or finishes – so you might not end up with the product that you thought you paid for. Thirdly, obtaining finance can be an issue if your situation changes, credit policies change and/or the property is valued less than the purchase price by the bank (which is common).

THE ADVANTAGES WON'T MAKE YOU RICH EITHER!

The commonly promoted benefits associated with OTP apartments won't make you independently wealthy:

- Stamp duty savings – this is a once off saving. Notwithstanding that you might end up overpaying for the asset when you purchase it, a once-off saving won't make you rich. What you need is perpetual compounding capital growth.

- Depreciation – depreciation is a non-cash tax deduction. Depreciation is a measure of the reduction in value. Yes, your asset it worth less each year and you get a tax deduction for it – does that sound like a good investment to you? Secondly, you must eventually spend money on repairs and maintenance to maintain any depreciating asset (like an old car).
- Higher rental income – the higher rental income from an OTP apartment might sound great but how many properties like that do you need to own to retire? Three or four? And that's only if you have no debt against them. Investing for income is the wrong approach because you'll lose half of your return in income tax.

WHY TOWNHOUSES ARE PROBABLY NOT A GOOD IDEA EITHER

Townhouses typically consist of multiple free-standing dwellings constructed on one standard residential block – often there's 2 to 5 dwellings on one block. They can either be attached or detached. They typically have two to three bedrooms and a garage.

The reason that townhouses typically do not make good investments is that they tend to be located in secondary land locations. That is, they don't tend to be in blue-chip suburbs – or if they are, they are in impaired locations such as on a main road. The reason for this is that developers can only construct townhouses for a profit if the cost of land doesn't exceed a certain value. For example, a townhouse development in the middle of Toorak won't make economic sense because the developer would have to pay too much for the land and there wouldn't be any profit for them.

Sometimes people think near enough is good enough. That is, a property in a secondary location might still enjoy a reasonable growth rate. That's possibly true. However, why take the risk? Why not invest in a location that has the highest probability of growth? Secondly, in a rising tide, all ships rise. What happens if the tide stops rising and the property market struggles? Red diamonds will always be in demand because they are scarce. Invest in assets that have the fundamentals to do well in virtually any market condition.

Also, often the architectural style of townhouses tends to date i.e. it's not timeless like Victorian cottages.

Finally, townhouses lack the other two fundamental prerequisites being scarcity and a sales/growth history.

NEWLY CONSTRUCTED HOUSES

Newly constructed houses are typically located in areas where land supply is not scarce and that's why they won't generate long-term capital growth. In fact, land supply is often abundant! Sometimes newly developed areas enjoy a once-off spurt of growth i.e. the land value increases between land release one and two. This occurs mainly because the area attracts some amenities such as shops, maybe schools, a doctor, etc. – but it's not a perpetual driver.

Again, also there's no historic growth performance either.

WHAT APARTMENTS ARE WORTH INVESTING IN?

Not all apartments are created equal. Older style apartments can be classified as investment-grade if they tick all three boxes:

- More than 50% of its value is land: That is because they typically consist of a block of say eight apartments on a very valuable parcel of land. The block of land might be worth $3 to $4 million – so each apartment's land value is notionally worth $375k to $500k each. Investment-grade apartments are typically built between 1920s and 1970s – so the building's value has depreciated to a base level (i.e. little in the way of future depreciation).
- They have a strong scarcity element: Older-style apartments tend to have no more than 10 on a block, their architectural style tends to be scarce and timeless and they are in locations where land is very scarce and in high demand.
- They have proven performance: Because they have been bought and sold many times over the past 30 to 40 years, we can calculate the property's historic capital growth rate.

Sometimes clients ask me whether the potential oversupply of new apartments will impact the returns on investment-grade, older-style apartments. The short answer is no. In the short-term, there might be increased pressure on rental income (i.e. lower income). However, in the short to medium term the newer apartments will start to wear and lose their sparkle and be in less demand by tenants. They aren't constructed as well as the older style apartments. In the long run, investment-grade apartments will perform very well due to the three factors mentioned above.

GET ADVICE

If you are ever in doubt whether you should invest in a particular property or not, get independent advice i.e. advice from someone other than the sale agent/developer. We have a network of property advisors that we work with and trust so if you need a referral, contact us (of course we have no financial affiliations with these advisors and/or receive no benefits as a result of making the referral).

For more information, please contact:

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Phone: +61 3 8624 4610

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

WebAIRS reporting continues to provide an important opportunity to examine practice and engage in the process of quality improvement. The most recent data analysis has focussed on the identification of patient or procedural factors associated with more adverse outcomes from reported incidents.

Following January's release of analysis of the first 4000 incidents in webAIRS, the second of the webAIRS overview articles has been published in the March edition (Vol 45, Issue 2) of *Anaesthesia and Intensive Care*. The ANZTADC Publications Group examined cleansed de-identified webAIRS data in order to pinpoint themes more common to adverse outcomes compared to incidents with a more benign course. Anaesthesia technique was not analysed in this cross-sectional report because it will be the subject of a separate, more detailed, report in future.

So what are the patient or procedural factors common to harmful incidents? The following themes emerged as having a higher risk (>50%) of harm (versus no harm) to the patient:

- A body mass index of less than 18.5 kg/m^2.
- Having a procedure outside of the theatre setting, or being in post-anaesthesia care units.
- Undergoing a procedure categorised as cardiovascular or neurological.

Further to causing harm, these themes were also most prevalent in incidents that resulted in death, (albeit with a much lower incidence). So too were:

- A patient being older than 80 years of age.
- An American Society of Anesthesiologists physical status rating of 4 or 5.
- Non-elective procedures.
- Incidents occurring afterhours (that is, between 6pm and 8am).

Of the first 4000 webAIRS incident reports, 26% were associated with harm and 4% death. With the recognition of risk factors, the opportunity for early intervention and request for assistance at first signs becomes possible. In education and training, teaching around incident prevention and management can give focus on these themes. With further research and investigation, avoidance of many of these incidents and their adverse outcomes may be achieved. WebAIRS contribution to continuous improvement activity and positive patient outcomes is proving an important component in quality improvement in anaesthesia.

S.Walker,
ANZTADC Coordinator

Reference.

- Patient and procedural factors associated with an increased risk of harm or death in the first 4,000 incidents reported to webAIRS. N.M. Gibbs, M.D. Culwick, A.F. Merry. Anaesthesia and Intensive Care, Volume 45, Issue 2, 159-165 March 2017.

For more information, please contact:

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Medical Director, ANZTADC

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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.

INSIDE YOUR SOCIETY

POLICY UPDATE

In this issue, ASA Policy Manager, Chesney O'Donnell, and Policy Officer, Elaine Tieu, give an overview of further trends in anaesthesia billing practices and the topical issue of end-of-life choices.

LOCAL ANAESTH NERVE BLOCK ITEM NUMBERS

Among one of the most frequently asked queries, are in relation to the local nerve blocks. The MBS items applicable to peripheral nerve blocks vary, depending on circumstances. No MBS item is applicable if the block is performed as the primary form of anaesthesia for the procedure. Again, the base anaesthesia item from group T.10 covers whatever form of anaesthesia is chosen for a particular patient. If the block is performed for the purposes of postoperative analgesia, a limited number of MBS items may be applicable. Items 22040 to 22050 cover certain femoral, sciatic and brachial plexus blocks where used for postoperative analgesia (Table 1).

MBS group T.7 has a range of items, covering blocks of various peripheral nerves. However, T.7 nerve block items cannot be charged in association with T.10 items for initiation of anaesthesia. T.7 items are generally only applicable where a surgeon performs the block, or a pain medicine physician performs the block as an independent procedure. Occasionally, a second anaesthetist with special expertise in regional anaesthesia may be called in to assist the primary anaesthetist. Here, a T.7 nerve block item would apply to the services of the second anaesthetist.

Ultrasound guidance is frequently used to guide nerve block procedures. Item 55054 may be applicable to the ultrasound procedure; however, it does not apply in association with T.10 MBS items. It may apply to a service covered by a T.7 nerve block item, provided the terms of the Department of Health's Diagnostic Imaging Accreditation Scheme are met, which involves having the imaging equipment certified with a location specific practice number (LSPN).

The transversus abdominis plane (TAP) blocks is the subject of regular member queries. It is currently not covered in the MBS. The most closely matched MBS item is 18262 for blocks of the abdominal wall nerves. In the recent ASA RVG 19th edition, the EAC has revised the descriptor of the ASA RVG item CV225 to include TAP blocks along with other lower abdominal wall nerves to better reflect the utilisation of this procedure.

The ASA version of the RVG has three items covering nerve blocks performed for the purposes of postoperative analgesia (CV081-CV083) an item specifically for a nerve block catheter insertion, as outlined in Table 1. As

Table 1: MBS and ASA RVG items for local anaesthetic nerve block services.

MBS Item	Fee/ Units	ASA Item	RVG Units	Description
22040	2 units			Introduction of a regional or field nerve block perioperatively. - via the femoral OR sciatic nerves, in conjunction with hip, knee, ankle or foot surgery.
22045	3 units			- via the femoral AND sciatic nerves, in conjunction with hip, knee, ankle or foot surgery.
22050	2 units			- via the brachial plexus, in conjunction with shoulder surgery.
55054	$109.10			Ultrasonic cross-sectional echography in conjunction with a surgical procedure, using interventional techniques.
18262	$62.50			Injection of an anaesthetic agent in the ilioinguinal, iliohypogastric, or genitofemoral nerves, one or more of.
		CV225	5	As above with the inclusion of TAP block.
		CV081	4	Major nerve block to provide postoperative pain relief. - proximal to the elbow or knee, including intercostal nerve block(s) or plexus block.
		CV082	2	Minor nerve block to provide postoperative pain relief.
		CV083	5	Major peripheral nerve block performed perioperatively, to provide postoperative pain relief. - with the introduction of a catheter to allow continuous nerve blockade.

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.

The ASA currently has an application for new MBS items to match CV081-CV083, being considered by the Medical Services Advisory Committee (MSAC). If successful, this will result in the introduction of new MBS items to cover all instances of nerve blocks being performed for post-operative analgesia, not just the limited range of blocks currently covered (22040, 22045, 22050).

In reviewing the application, MSAC has provided numerous reports of assessment and evaluation, which ASA have submitted responses to. Members can read these on the ASA website (http://ow.ly/Xzdo30aKk4j). We anticipate to receive the final appraisal document from MSAC, in a form known as the Public Summary Document, shortly. This document will explain the rationale for MSAC's advice to the Health Minister for the funding to be recommended or not. However, given our past experiences with MSAC, new Medicare funding for this initiative will be difficult to obtain.

CONTACT US

If you have any questions about the ASA Policy Team or any of the work they and their committees do, please do not hesitate to get in touch.

Email: policy@asa.org.au

Phone: 1800 806 654.

END OF LIFE CHOICES: POLICY VS LAW

The Victorian Government has been considering the issue of "assisted dying" with the government canvassing the possibility of introducing a bill in the second half of 2017 which could potentially make it the first state in Australia to legalise assisted dying for the terminally ill. A ministerial advisory panel was set up comprising of clinical, legal, consumer, health administration and palliative care experts. "Between 2009 and 2013, 240 people experiencing debilitating physical decline took their lives, most of whom were over the age of 65"[1]. South Australia, last November, tried for the 15th time to pass their bill without success.

MPs will be granted a conscience vote after Premier Daniel Andrews was delivered a report in June 2016 with recommendations given by a cross-party parliamentary committee[2]. Premier Andrews' father died of cancer last April 2016 which affected his viewpoint on the matter.

In brief, the report highlights three main proposals;

- That the patient is of sound mind and competence when making such a decision and is suffering from a serious incurable condition
- That a request be repeated three times, one of which is to be written formally and accompanied by the opinions of two legally protected independent doctors
- Doctors would prescribe a lethal drug in compliance with a review board

But even if such parameters were to be put in place, how will the courts conduct their final deliberations? In this article, I examine concepts of what a court deems as in the 'best interest' and the issues of 'capacity versus competence'.

'Best Interest'

A Supreme Court in Australia, when making a decision concerning the welfare of a patient, will be influenced by what is in the 'best interest'. There has been a few small number of cases "where family members have gone to court seeking to prevent doctors from withholding or withdrawing treatment from their loved ones"[3]. The family would challenge the doctor's assessment of the futility of treatment[4]. In such cases the patients were deemed not competent and fell within the *parens patriae* jurisdiction or the equivalent statutory welfare jurisdiction for children[5].

In the case of *Messiha v South East Health* [2004] NSWSC 1061 a 75-year-old man suffered a cardiac arrest with his brain having been deprived of oxygen for 25 minutes. The health team was under the opinion that the artificial ventilation, hydration, and nutrition he was receiving should be stopped. The family disagreed and sought a court order or injunction to compel the healthcare team to continue treatment. The court, in a decision given by Howie J, concluded that it was not in the patient's best interest to continue the treatment. However, generally speaking "a doctor's assessment of futility has generally not succeeded, a determination of what is in the patient's best interests (which can involve a consideration of futility) is seen as ultimately resting with the court"[6]

INSIDE YOUR SOCIETY

Capacity v Competence

In another Australian case study (in Victoria), a 74-year-old Sicilian woman was admitted to hospital with stridor and dysphonia in the setting of concurrent URTI. Surgery was recommended but she declined[7]. After spending time in intensive care and discussion with her family, as well as multiple doctors, including senior endocrine surgeons, ear, nose and throat surgeons, intensivists and anaesthetists, the advice was that she would require surgery or die from tracheal obstruction. She refused for cultural reasons (a scar on one's neck — the Sicilian bowtie — refers to the Mafia practice of throat-slitting and depicts the scar-carrier as dishonourable).

Every practitioner regarded her to be competent to make this decision, but a neuropsychological assessment to formally document her capacity before discharge deemed the patient incompetent to make her own decisions regarding treatment. It was concluded that "she could state the risks and consequences, she was not adequately and rationally weighing these up against the benefits". Extensive anaesthetic planning ensued by an anaesthetic team of two senior anaesthetists and an anaesthetic nurse and a total "thyroidectomy was completed without complication, and the patient made a good postoperative recovery". The patient was grateful and satisfied with the outcome and later discharged "with no stridor, normal voice and normal parathyroid function".

This case demonstrates the complications when determining how interchangeable capacity and competence actually are. It raises difficult medicolegal and social dilemmas. In Victoria, s36(2) of the *Guardianship and Administration Act 1986* states:

> *a person is incapable of giving consent to the carrying out of a special procedure or medical or dental treatment if the person — (a) is incapable of understanding the general nature and effect of the proposed procedure or treatment; or (b) is incapable of indicating whether or not he or she consents or does not consent to the carrying out of the proposed procedure or treatment.*

And yet the Victorian Office of the Public Advocate would argue that "an assessment of competence is not always straightforward and may require input from specialists such as neuropsychologists, psychiatrists and geriatricians"[8]. In any event this would imply employing the "services of multiple teams — medical, psychological and legal — and to engage family in the decision-making process".

Court Considerations

In conclusion, here are the main areas that the court would be concerned with when considering an adult patient's right to refuse medical treatment and end of life;

- futility of treatment
- commencement or continuation of treatment deemed overly burdensome
- patient's prognosis and the impact of commencement or continuation on the patient's quality of life
- patient's views and wishes
- the interest of others like the health authority and even the saving of costs so as to have a treatment end
- professional opinion by which the courts tend to prioritise over that of the patient's family

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PROFESSIONAL ISSUES ADVISORY COMMITTEE

DR ANTONIO GROSSI
PIAC CHAIR

INTRODUCTION

This edition of Australian Anaesthetist has featured many quality articles on regional anaesthesia. I remember being told during my training that if one explained all the complications of a brachial plexus block or epidural most patients would probably decline from proceeding. The principle of self-determination or body inviolability maintains that no one is allowed to touch another person without their consent. Patients have a right to determine what happens to their bodies and what are the implications of any procedures. Often anaesthetists are proposing interventions with significant potential side effects that may have a plausible benefit but are not absolutely necessary to have the proposed surgical treatment. Obtaining informed consent makes sense.

ELEMENTS OF CONSENT

1. Competence

The patient must have the capacity to understand the general nature and effect of the proposed anaesthetic. Adults may be incapacitated due to illness, dementia, intellectual disability or temporarily impaired by drugs, alcohol or an inter-current medical condition. Children require their parent or guardian to give consent. When a child develops legal autonomy has been challenged and may vary depending on the jurisdiction. Relevant factors include the child's understanding about the nature, purpose, and consequences of treatment or non-treatment.

2. Voluntariness

The patient must be free to give or refuse consent free of coercion. Undue influence may be provided by healthcare providers, family members or careers.

3. Specificity

Consent relates to a specific anaesthetic intervention. Extension to cover emergency life threatening contingencies must be self-evident and does not include extending the boundaries of the agreed treatment.

4. Understanding

The information must be presented to the patient in a comprehensible form and language. Every effort must be made to utilise appropriate medical interpreters for non-English speaking patients. Technical terms need to be translated into plain language statements. Modern visual media may be employed here.

LEGAL REQUIREMENTS OF CONSENT

1. A duty to provide information about the anaesthetic in general terms and what this would involve. This should protect the anaesthetist from a claim of *battery* or *criminal assault*.
2. A duty to inform the patient about *material risk*. This should protect the anaesthetist from a claim of *negligence* regarding the risks of treatment. Material risk has been described as:
   a. Would a reasonable person likely to attach significance to the risk?
   b. Would this particular patient, given this context, attach significance to this risk if they were warned about it?
3. Not all risks are material risk and therefore the anaesthetist must exercise clinical judgement in deciding what to discuss.

WHAT TYPE OF INFORMATION SHOULD BE DISCUSSED?

There are a number of documents available from professional societies, colleges, research councils and statutory bodies that provide specific information and process required for consent. For anaesthesia, this relates to the patient's clinical and social circumstances, the proposed surgery or intervention and what are the possible anaesthesia options, their potential benefits, side effects and complications. The alternative treatment options and the consequences of not under going treatment must also be discussed. This includes the likelihood and risks of the administration of blood products.

Consent is not about signing a form. It is a process. This includes the time and opportunity to reflect on the information and ask questions. These enquiries may assist the anaesthetist to understand what are the priorities for their patient. For example, a right-handed plumber may need to know about the risk of complex regional pain syndrome associated with a right brachial plexus block in great detail.

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DOCUMENTATION OF CONSENT

There must be some written documentation of the consent process, which ultimately becomes part of the patient's hospital record. This should include the matters discussed, the material risks, that the patient had an opportunity to reflect on the matters and questions were answered. The anaesthetist may keep a copy of this consent, since hospital records may not be readily available in the future.

Signing a consent form is required in some jurisdictions and by some hospital by-laws. The process of signing may reinforce the importance of the consent process to all stakeholders. Prepared consent forms and patient information sheets may be useful but are not a substitute for the consent process.

WHO SHOULD OBTAIN CONSENT?

The anaesthetist administering the anaesthetic or regional block is ultimately responsible for ensuring the patient is adequately consented. Other personnel may have assisted in this process, but the responsibility for consent cannot be delegated.

THERAPEUTIC PRIVILEGE

There may be exceptional circumstances where providing information to the patient may cause them harm. The onus is on the anaesthetist to prove this is the case.

EMERGENCIES

In life threatening situations treatment may be provided proportionate to the patient's needs only and not beyond that which is required to prevent death or serious damage to their health. This does not include providing treatment where an advanced directive or refusal of treatment certificate exists.

FINANCIAL CONSENT

In the case of a private patient being treated under a fee-for-service arrangement, this should include individualised financial consent, which includes consideration of a patient's financial situation if there are to be 'out of pocket' expenses.

CONCLUSION

Ultimately common sense dictates what is a quality consent process. Short cuts due to production pressure or other extenuating circumstances, lack of care in appreciating the patient's particular circumstances or failing to document the consent adequately, may have serious consequences.

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OVERSEAS DEVELOPMENT AND EDUCATION COMMITTEE

Each year many Australian anaesthetists commit time to working and teaching in challenging environments; these may be developing countries lacking the physical resources of wealthier neighbours, countries affected by natural disasters or wartime conflict. Time spent in-country may vary from a few days to many months, but the fundamental challenges remain the same. Resources to help mentally and physically prepare interested anaesthetists are not easily sourced, and Haydn Perndt and Rob McDougall from the ODEC Committee have written a brief document summarising many of the key issues that need careful thought and consideration prior to departure. Both authors are experienced anaesthetists who have worked extensively overseas and helped many colleagues prepare for similar experiences.

ASA GUIDELINES ON HUMANITARIAN WORK

Anaesthetists Working and Teaching Overseas

There are many opportunities for ASA, NZSA and ANZCA members and Fellows to work and teach overseas. Anaesthetists often ask for advice as to how to select and assess possible trips. This document aims to provide Fellows and members with some broad principles to help with their deliberations.

When aid is poorly coordinated, as unfortunately it often is, it can disempower and further weaken developing countries and their governments. Time and money are wasted with transaction costs and this can lead to fragmented, contradictory and unsustainable outcomes. Ministers of Health in developing countries repeatedly describe their experience of enthusiastic and well-intentioned development interventions that, in their view, contribute to rather than solve problems. But they are equally clear: development when delivered effectively is hugely beneficial[1].

From a former Mozambique Minister of Health:

> *When I was appointed minister, I thought I was the minister of health and responsible for the health of the country. Instead, I found I was the minister for health projects run by foreigners.*

The principle of ownership

The project should ideally be led and driven by the needs of developing countries, not by the enthusiasm and interests of the Australian and New Zealand participants. Interventions should be based on written agreements "owned" by the developing country partner and avoid "supply-side driving".

The principle of alignment

The project should be aligned with the recipient government's health plans as well as those at district and hospital level. This ensures that ownership is encouraged, not by-passed or undermined.

The principle of harmonisation

The project should be adequately co-coordinated – with initiatives from other development partners (Australia and New Zealand and others) working as one.

Evidence-based

The project should also be subject to proper monitoring and evaluation. It is imperative to identify and (wherever possible) measure actual outcomes or results, because so much well-intentioned activity in the past has either done harm or failed to achieve its stated aims.

Sustainable

The initiatives should be supported by long-term commitment from all parties involved. If the initiative is only undertaken by an individual, however motivated, with little institutional buy-in, the activities are likely to fall by the wayside when the individual moves on.

Mutually accountable

The responsibility for the project or program should be shared.

Working opportunities may be either uniquely one, or a combination of the following types of activities: **Short-Term Medical Missions (STMMs or "service" trips), locums, teaching or longer term aid and capacity building assignments**.

These differ considerably in the challenges and rewards they offer.

Service trips deliver immediate and obvious benefits for patients, but often limited opportunities for training and

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development. Longer term projects can lead to sustainable positive impact for health workers and to the health system.

For those projects involving **STMMs ("service" or clinical work)**, Fellows and members are urged to ensure that:

1. The project has equitable patient selection criteria
2. The project has appropriate follow up arrangements to manage ongoing care and complications
3. The project has a process to identify and analyse adverse events.
4. All team members are working within their current scope of practice for planned procedures
5. All team members have appropriate registration with local regulatory authorities
6. All team members have indemnity insurance which covers their planned clinical activity

To be effective, **longer term and capacity building or development program**s have the following attributes:

1. The program has been developed in response to a needs analysis conducted with involvement of the local Ministry of Health and if possible counterpart health workers
2. The program has a prime focus on education and skill transfer with clear learning objectives
3. The program has a clearly defined monitoring and evaluation system
4. The program has sufficient opportunity for counterpart feedback

Fellows and members are advised to be familiar with local regulations and customs prior to travel and ensure that these are adhered to during project work. Working in a culturally sensitive manner is of paramount importance. "Visiting Experts" are only expert in their own medical circumstances, and the challenge of working overseas is to become a learner as well as a sharer of knowledge and skills.

Fellows and members should ensure that they are appropriately briefed before committing to service trips or project work. Professional preparation by attending a course is very useful. The Real World Anaesthesia Course is held yearly and rotates through Frankston Vic, Darwin NT in Australia and Christchurch New Zealand, Anesthesia in Developing Countries, is hosted by the Oxford, UK Department of Anaesthesia in Kampala, Uganda and the North American Global Outreach course alternates between Halifax Canada and Boston USA.

Dr Chris Bowden
ODEC Chair

Reference

1. http://www.thet.org/health-partnership-scheme/resources/the-framework-for-nhs-involvement-in-international-development-1

NOTE: The guidelines are deliberately brief, and do not claim to be exhaustive. The Guidelines are freely accessible through the ASA website.

GET INVOLVED

One of the major opportunities for interested anaesthetists to further prepare is to attend the annual RWAC. Many of these issues are further explored in-depth, and expanded to include discussions on the importance of ethical considerations. 2017 RWAC will be held in Christchurch, NZ later this year.

For further information on any of ODEC's activities, or how you can become involved, please contact ODEC Secretary, Maxine Wade, via email: mwade@asa.org.au.

MICRONESIA ANAESTHETIC REFRESHER COURSE
PALAU, 10–14 APRIL, 2017

SOME CONTEXT...

Micronesia encompasses an archipelago of over 2000 islands stretching across the northern tropical pacific. The islands are noteworthy for their small size reflected in their etymology from the Greek words 'small islands'.

The archipelago is home to a loose association of five sovereign states. All are heavily dependent on overseas aid particularly from the United States which regards archipelago as vital to its geostrategic interests.

During WWII, the Micronesian islands were used as strategic stepping stones by Imperial Japan's conquest across the Pacific; and then subsequently by the American's defensive response. As a result, some of the fiercest battles occurred across these small islands which subsequent to that, staged the allied bombing of Japan.

Most employment is within the public sector, with an average per capita GDP of about US$2,000. Unemployment, particularly youth unemployment, remains high. Most families rely on subsistence fishing within a very strong family network. Religion plays a dominant role within the community. The population is almost entirely Christian, a legacy of the early Spanish colonisation.

SMALL ISLAND MEDICINE

Medical services vary tremendously across Micronesia. Many States are plagued by a chronic shortage of consumables, pharmaceuticals and pathology reagents, with most items expired soon after arrival. On some of the islands, regular electricity outages are the norm. Micronesia remains heavily dependent on visiting teams, predominantly from the United states.

the situation has become chronic, with anaesthesia provided by only a single nursing anaesthetist over the past two years

The delivery of safe and effective anaesthesia was identified by the World Health Organization in 2005 as one the key pillars in addressing the global burden of surgical disease. The challenges of providing a skilled workforce with access to continuing medical education are a stark reality throughout Micronesia. Prior to the introduction of the Micronesia Anaesthetic Refresher Course (MARC) by the ASA in 1994, anaesthesia was provided entirely by an in house trained nursing cohort with no formal training in anaesthesia. The continued advocacy and support by the ASA has meant that today anaesthesia is medically driven with support from nurse practitioners with formal postgraduate training in anaesthesia.

Significant challenges however remain. Some of the states continue to be confounded by extended length-of-absence by a medical anaesthetist with anaesthesia provided by nurse anaesthetists. In Chuuk, the situation has become chronic, with anaesthesia provided by only a single nursing anaesthetist over the past two years.

The limited number of anaesthetists across Micronesia has meant that it remains near impossible for them to leave their island state for an extended period without seriously disrupting medical services. One of the consequences of this has been severe isolation and lack of ongoing medical education.

The MARC has been addressing this need since 1994 when the ASA held the first course in Palau.

During this time, the ASA has spearheaded this much needed course with the collaborative support at various time of the Pacific Society of Anaesthetists, NZSA, the Philippine Society of Anesthesiologists, the Japanese Society of Anesthesiologists and the WFSA. The logistics in undertaking these meetings are considerable. In order to allow Micronesian anaesthetists to attend, locums are often needed on each of the island states.

Dr Stuart Lavender supervising hands on regional ultrasound to John Junior from The Marshalls

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Front row (left to right): Dr Arthur Vartis, Dr Stuart Lavender.
Middle row: Dr Nori Kuratani, Dr Chihiro Imai, John Junior, Dr Isau Mekoll.
Back row: Nathan Carlton, Ngoriakl olmetelel, Junie Samson.

Over the past two decades, tangible results have borne fruit. In 2005 the Micronesia Anaesthetic Society (MAS) was formed promoting and raising awareness of the critical role of anaesthesia in addressing surgical disease. During this time we have seen the introduction of the primary trauma and Essential pain management courses as part of the MARC week. In 2012 the ASA supported a delegate to the WFSA meeting in Argentina.

MICRONESIA APRIL 2017

The recent meeting of the Society was held in Palau May 2017. The theme was Safe Anaesthesia. In attendance were Dr Arthur Vartis and Dr Stuart Lavender from the ASA and Drs Norifumi Kuratani, and Chihiro Imai from the JSA. A third Fellow, Dr Peter Duff, provided locum cover to Chuuk to enable the local anaesthetic nurse to attend. In addition to the Micronesian anaesthetic delegates, we had attendances from a broad group of nursing and medical staff.

We had the privilege at this year's meeting of having the Health Minister open the course and a dinner invitation to discuss advocacy towards safe and effective anaesthesia. The importance of gaining an awareness at the ministerial level and the top down impact this has in allocating sufficient resources cannot be overstated.

There were a total of 15 presentations covering critical bleeding, airway protocols, obstetric anaesthesia, anaesthetic crisis management, perioperative medicine and paediatric anaesthesia. This year we introduced the role of ultrasound in vascular access and regional anaesthesia.

The MARC is a highly interactive program focusing on a two-way dialogue. This is facilitated through Problem Based Learning Scenarios, case discussion, workshops and simulation sessions.

True/false questionnaires are completed before and after each day session. This provides a valuable means of assessing course effectiveness and knowledge acquisition. Follow-up discussions can then readily target any identified knowledge gaps.

Case presentations are an extremely valuable Q&A experience for all of the delegates, allowing self-reflection and group learning dynamics. The program was well received and there was an impressive level of unabated interest and participation right through to late Friday afternoon.

The social content is an important component in the MARC. An excursion is typically arranged to showcase the host island and the course concludes with an evening function where certificates are handed out. The night also included a team based jeopardy style game which pits each island group against each other in questions ranging from course content to general knowledge.

This was the 17th meeting under the auspices of the Micronesian Anaesthesia Society and represents the culmination of 23 years of work by the ASA in addressing the provision of anaesthesia throughout the region. The next meeting will occur in May 2017 in The Marshalls.

All of the anaesthetists work in areas of complete isolation and their society the MAS in partnership with the ASA provides a forum within which the Micronesian anaesthetists can continue to cultivate their experience and knowledge base. The benefit that the MARC provides in the support of safe and effective anaesthesia delivery is critical.

Dr Arthur Vartis

Townsville, QLD

INSIDE YOUR SOCIETY

ASA MEMBER'S GROUPS UPDATE

TRAINEE MEMBER GROUP

Dr Scott Popham, Chair

Quarterly email

At the beginning of the month of April we sent out a newsletter to the TMG, the content of which was tailored for trainee members. This was as a result of identified items of the Member Survey which requested segmented communications to certain groups.

This initiative serves to remind members what events and opportunities are available to benefit you, and we will be sending out regular emails to that end.

EpiCCS Study

The week of data collection for the Australasian arm of the EpiCCS study is Wednesday, 21 June 2017.

Ethics applications are currently underway at various hospitals throughout the country, with a view to achieving approval by the above date. Queensland was able to achieve multisite approval thanks to the PAH site lead Dr David Highton who was also involved with the organisation of the UK study and has been an immensely helpful resource.

National multisite approval was not feasible when the study was conceived two years ago and as such, each participating hospital must apply for ethics approval locally. The Alfred application is available to the site lead at each hospital which obviously makes the application much easier, however local legislation and processes differ according to state (as well there being some differences between HRECs). We have encouraged registrars who are participating to involve a consultant with an interest in research to guide them through their local process, which has happened to good effect.

The week of data collection looks to be a busy one, however I am looking forward to receiving feedback from registrars about their experiences in this endeavour, which represents a unique utilisation of the Trainee Members Group network.

Welfare

With the anaesthesia and surgical colleges collaborating to reduce workplace bullying, discrimination and sexual harassment, these aspects of trainee welfare are receiving much attention at present. Other aspects of welfare are reported in different forums, and I'm concerned about the rising trend of self-harm in junior doctors (in all specialities), as are other members of the TMG state rep committee. I attended the Welfare of Anaesthetist's CIG meeting at the Brisbane ANZCA ASM in May and will attend other forums to explore and discuss the issue. I'm interested to hear suggestions about how the TMG can further assist trainees in welfare matters (at the moment Part 3 Courses include components which address welfare specifically and other communal events organised by the Society are useful for providing education and support). In the meantime, I encourage trainees to be registered with a GP and engage with them, particularly around exam time, and be aware of other supports such as the Doctors' Health Advisory Service. Please stay informed about the most common stressors relating to our speciality (as well as training of junior doctors at large) and be cognisant of how they affect both you and your colleagues.

The engagement of a performance psychologist may be of benefit during exam preparation – Dr Patsy Tremayne (based in Sydney) uses sports and performance psychology principles to help many doctors around Australia during exam time. She skypes all around the country and can be contacted on patsytremayne@gmail.com.

TMG CONTACT

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

Or you can call the ASA offices on: (02) 8556 9700

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RETIRED ANAESTHETISTS GROUP

Dr Don Maxwell, National and NSW Chair

The numbers of members of our group grow nationally year by year and are now over 450. RAG members enjoy maintaining contact with their fellows of many years. Each State has its own independent organisation which arranges regular gatherings frequently over lunch and beverages where old friendships are renewed. There is also a well-attended luncheon at each of the annual meetings of both the ASA and of the College.

The NSW section of RAG recently (28 March) had one of its regular luncheons at The Cruising Yacht Club of Australia in Rushcutters Bay in very pleasant surrounds looking out on to the deck of the Club to the sound of clinking rigging. We have been meeting here several times a year lately and have had one of our members to talk on a subject of interest. This time it was Dr Owen Thomas who spoke on "Shipwrecks, navigation and the mystery of longitude". It was fascinating. There were 25 attendees including wives and partners and the menu was excellent. Owen is a very experienced sailor and holds a Master Mariners Certificate. Sailing is his thing! His talk and the lunch were enjoyed by all.

RAG CONTACT

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: (02) 8556 9700

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HISTORY OF ANAESTHESIA LIBRARY, MUSEUM AND ARCHIVES NEWS

NEW DISPLAYS

Over the past month, the Harry Daly Museum has undergone a refresh of its permanent display. This has involved removing copious amounts of text from the display cabinets and re-organising the museum drawers. The new display is now in line with current National Standards for Australian Museums and Galleries, allowing its contents to be more accessible to diverse audiences.

This has been achieved through reassessing how visitors interact with the information and research on display. Prior to the refresh, the display cases were filled with timeline cards – separate cards containing snippets of information on significant events. Included was the first surgery with local anaesthetic and when certain drugs were manufactured/distributed. The cards have been removed from the display cases and placed in the top drawers of the museum.

By shuffling the contents of the drawers and the timeline cards the museum has been able to achieve a balance of objects and information on display. It has transformed the space from didactic and directed learning to something more constructivist. Visitors are now able to decide how much content to view and what they would like to read and learn.

This is only the first stage in transforming the museum to be a more open space catering to different audiences. Over the next couple of months, more labels will be introduced to further explain objects as well as the inclusion of more stories. These will hopefully allow for a greater insight into the experiences of managing pain and the profession.

One story in particular is that of Frances Burney. In 1811, Burney underwent a mastectomy without anaesthesia. Her in-depth account of the surgery reveals some of the sensations and thoughts that occurred pre-, during, and post-surgery. Her story can be displayed alongside early surgical equipment, allowing the intangible and tangible medical heritage to merge.

Another new addition to the museum has been the integration of library material. Librarian, Peter Stanbury, and I have worked closely to extend the story of early anaesthesia. Alongside a replica of Morton's inhaler and a bottle of decanted 'aether', we now have three texts on the early development of anaesthesia. This includes the work on Chloroform by John Snow, Nitrous Oxide by Humphry Davy, and Etherization by Nathan Rice.

The museum has also introduced more prominent imagery to complement the objects. In the first display case are two drawings – one of a poppy and one of a white lily. Pain medicine has a strong botanical heritage. Opium was derived from poppies, whereas white lily flowers were used to treat swelling, bleeding, and coughs. Their integration into the museum space shows the artistic side of treating pain throughout the ages.

Rebecca Lush, *Museum Curator*

BOOK A TOUR

The museum will be running tours every Thursday and Friday at 11.00 am and 2.00 pm. To book your place on a tour please email: rlush@asa.org.au.

BEFORE

AFTER

INSIDE YOUR SOCIETY

AROUND AUSTRALIA

VICTORIAN COMMITTEE

Dr Jenny Knott, Chair

The Victorian branch AGM and dinner was held on Sunday, 5 March; and after formalities, we were entertained by our after dinner speaker, Dr Tony Atkinson. As a retired anaesthetist, who in younger years worked as a waiter at 10 Downing St, and a footman at Buckingham Palace, he had numerous hilarious life stories to relate, and his book *A Prescribed Life* is a great read.

A successful Medical Viva boot camp for Part 2 candidates occurred on 18 February. Many thanks to Dr Debra Leung for organising the day, and younger fellows and trainees for speaking and acting as models.

Our calendar of events this year included our New Fellows Forum on 9 May. In relaxed surroundings, various speakers discussed with our younger colleagues tips on establishing their anaesthetic career in the wider world and how to achieve a work/lifestyle balance.

On 30 May, the Committee hosted a cocktail function to celebrate the recent exam successes of Part 1 and Part 2 candidates with an open invitation to all our anaesthetic colleagues both senior and junior, and partners to attend.

In planning stages, is a night to discuss the forthcoming MBS changes, of which our ASA federal committee members have been in extensive discussions with the federal government.

On 29 July is our combined ASA/ANZCA CME meeting titled 'Back to the Future' with the theme 'Everything is New Again' at the Sofitel Melbourne Hotel. Dr Michelle Horne has organised a stimulating program and our state and interstate colleagues are warmly invited to attend.

On 22 August, we will be hosting a 'Planning and Moving into Retirement' talk for all our members to discuss the aftermath of the superannuation changes instituted on 1 July, and the options available.

Sadly we farewelled one of our esteemed colleagues, Dr Noel Cass, who passed away on 2 May. A memorial service was held on 10 May, and he will be sadly missed by his family and colleagues.

So, a busy calendar, and we hope to see many ASA members at the various functions.

SOUTH AUSTRALIA AND NORTHERN TERRITORY COMMITTEE

Dr Joshua Hayes, Chair

In the public health sector, technical completion of the new Royal Adelaide Hospital was announced in mid March. Staff are still none the wiser as to actual move dates, but we're told that transition can't occur until at least a 90 day refit/checking period is completed.

The last public sector doctors Enterprise Agreement expired in 2016, and progress towards establishing a new agreement appears slow (as ever).

In local legislation issues, an amendment to the Health Act brought to the attention of the ASA and ANZCA late last year appears to have been put on hold pending an additional consultation phase. The legislation would potentially have required additional licensing for premises providing most forms of anaesthesia and affected, not only anaesthetists performing in-rooms sedation, but also other specialists performing minor procedures requiring local anaesthesia. The only groups relatively unaffected by this change in legislation were dentists and procedural general practitioners. We await further information on this.

Finally, a reminder that the 2017 NT CME Conference 'Lost in Translation: Bringing Science to the Bedside' is coming up on 3 June in Darwin, and on 14 June, the SA CME Meeting 'How the unconscious controls our behaviour... for better or for worse' is occurring in Adelaide.

AUSTRALIAN CAPITAL TERRITORY COMMITTEE

Dr Mark Skacel, Chair

Dr Vida Vilinius, under the auspices of the ASA, held a very successful 2nd part exam preparation (Boot Camp) weekend in early February. Fifty-eight people

attended the course. Next year's course will be held on 3 and 4 February and be open to ASA members.

The ASA/ANZCA CME meeting 'Art of Anaesthesia' is to be held on between 23 and 24 September 2017 at the Australian War Memorial. The invited speakers are Prof. Girish Joshi (Texas, USA), Dr Ben van der Griend (Christchurch) and Dr Andrew Davidson (RCH, Melbourne). Lectures will be held on the Saturday and workshops on the Sunday. I urge all ASA members to attend this well organised event.

A membership drive social night was held at the East hotel on 4 May. It was great to catch up with some of the ACT retired members. Trainee members were out in force for the event and all attendees seemed to have an enjoyable evening. I would like to thank Kym Buckley from the ASA office and Martin Dempsey from the ASA Trainee Members Group for organising this successful event.

Late last year, the PIAC wrote a letter in support of ANZCA PS9 to The Canberra Hospital. We understand that the relevant hospital committee has finally endorsed PS9 and that nurses are not allowed to administer propofol for sedation within ACT Health facilities.

On the examination front, I would like to wish Jen Moran all the best when she meets the examiners in her Part 2 viva.

WESTERN AUSTRALIA

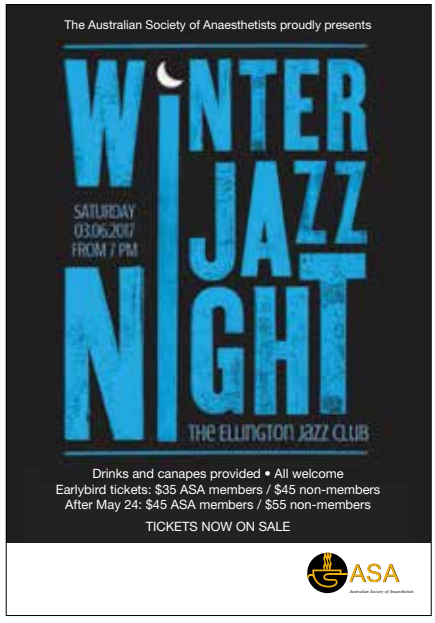
Dr David Borshoff, Chair

Western Australia healthcare continues to adjust to tougher economic conditions. Numerous local articles emphasising the cost of specialists, gaps and prosthesis are the weekly norm.

The Perth Children's Hospital currently has no opening date as debate continues concerning the source of lead in the water, other problems emerging and of course, who is accountable. It would be fair to say that taxpayers continue to fund a very expensive carpark at the moment.

The ASA/ANZCA CME Country Conference in Broome on 16 to 18 June has created a lot of interest with its theme 'Comfortably Numb'. Delegate numbers are high and it will no doubt be a very enjoyable weekend.

In the meantime, on 3 June the WA ASA/TMG representatives have once again organized a Jazz evening at Ellingtons Jazz Cub in Perth. This will be an opportunity for Consultants and Registrars from both Public and Private practice to have a fun evening of networking and music.



The immersive and simulation based learning committee (ISL), a diverse group of practitioners interested in promoting simulation in WA was wound up at the end of 2016. This has been replaced by the Western Australian Simulation in Healthcare Alliance, which will continue to promote and support all aspects of simulation in WA.

Lastly, we said goodbye to prominent Perth Anaesthetists, David Altree, Lyn Hewett, Max Sloss and Alec Sodhy who all passed away in the first half of 2017.

TASMANIAN COMMITTEE

Dr Michael Challis, Chair

Our annual scientific meeting in March was another successful conference, with Prof. Steven Shafer attending as our keynote speaker. Planning has commenced for next year's meeting, and hopefully the major components will be locked in soon. Our one-day winter meeting will take place on Saturday 26 August at Barnbougle – home to the iconic 'Barnbougle Dunes' golf course. The meeting theme is 'InnO_2vate' and will focus on airway and breathing issues, including a CICO workshop. With limited capacity at the venue we expect registrations to fill quickly.

Our AGM was held at the ASM, and I was re-elected as Chair, but the major positive for me was that the Tasmanian committee has been reinvigorated with new faces, and there have been some administrative changes to the way in which our committee functions. Hopefully this will increase the ability of the committee to support, represent and educate our members, and to promote the vital role of the ASA here in Tasmania.

INSIDE YOUR SOCIETY

BOOT CAMP CANBERRA FEBRUARY 2017

The Final Examination preparation Boot Camp was reprised in Canberra during February after its successful debut in 2016.

This is one of the range of events the ASA supports which are aimed at meeting the needs of trainees. The weekend was again open to all exam candidates.

Boot camp faculty

Current Final Examiners prepared presentations and participated in panel discussions. They were available throughout the weekend to answer questions to the group and to address individual concerns.

The faculty of Drs Luke Bromilow, Stephen Davies, Nicola Meares, Carmel McInerney, Prani Shrivastava and Linda Weber gave generously of their time, presentations and attention to individual questions.

Boot camp program

The weekend opened with voxpops from previous exam candidates followed by a walk through each exam section. Audience participation throughout was lively – candidates made good use of exam panel members to clarify misconceptions and do some mythbusting.

Better preparation

Techniques for improving responses to both written and viva questions were covered. Rallying from 'viva brain' was considered, along with responses that might be better avoided.

A video was presented on blending learning and performance modes as a means to better prepare for the exam.

Vivas and investigations

With March around the corner, there was an emphasis during the weekend on the upcoming medical vivas. Strategies for organising and improving performance for this section were offered. The medical viva requires candidates to focus their history and examination, rank information and synthesise their findings. Ensuring that the interpretation of relevant investigations adds value to the viva performance was emphasised for the medical and anaesthesia vivas.

Performance tips

Adding value to responses and use of constructs was demonstrated. Examples and a range of openers and scripts were reviewed.

Participants were actively encouraged to create their own customised scripts to deal with crises, catastrophes and other surprises. Their utility to buy time, send reassuring signals to examiners and to enhance replies to questions was a feature of several segments.

Thank you

The John James Foundation of Canberra is a supporter of medical educational activities and kindly provided their excellent theatrette as the Boot Camp venue.

Thank you to all delegates and presenters for their enthusiastic participation throughout Boot Camp. Feedback survey responses have been very gratifying—also full of suggestions for improvements. The challenge for Boot Camp 2018!

Best wishes to all candidates for success in their exams.

Vida Viliunas

Boot Camp Convenor

NEW AND PASSING MEMBERS

The ASA would like to welcome all new members from March to May 2017.

ORDINARY MEMBERS

Dr Sivapathasundaram Achuthan	NSW
Dr Barbara Beuthe	WA
Dr Neelam Bhala	NSW
Dr Vanita Mohan Bodhankar	VIC
Dr Steven Raymond Bruce	NSW
Dr Christopher Stephen Carter	QLD
Dr Florence Chikwanha	VIC
Dr Shona Chung	NSW
Dr Brenton Peter Coats	NSW
Dr David Daly	VIC
Dr Matthew Liang Jinn Ho	NSW
Dr Hsing-I Gina Hsu	QLD
Dr David Andrew Kingsbury	WA
Dr Benedict Krupowicz	VIC
Dr Jack Douglas Madden	TAS
Dr Evangelyn Malkoutzis	VIC
Dr Nicholas Peter Maytom	NSW
Dr Melinda Miles	VIC
Dr Justin Nazareth	VIC
Dr Husain Siraj Nazir	WA
Dr Bradley David Sartori	QLD
Dr Rajesh Sethi	SA
Dr Johanna Somfleth	SA
Dr Elizabeth Jenny Tham	SA
Dr Nathan Roy Thompson	NSW
Dr Catherine Traill	NSW
Dr Lokesh Varadiah Anand	TAS
Dr Andrew Wallace	SA
Dr Hasith Wickramaratne	NSW

ASSOCIATE MEMBERS

Dr Venkateshwar Komerelly	VIC
Dr Antony Y. Wong	VIC

TRAINEE MEMBERS

Dr Mark Barrenger	TAS
Dr Catherine Jane Bella	QLD
Dr Hannah Bellwood	QLD
Dr Jenny Bird	SA
Dr Danielle Bray	QLD
Dr Jovan Brdaroski	NSW
Dr Michael Gregory Brown	QLD
Dr Shaun Campbell	SA
Dr Mark Chemali	NSW
Dr Guang Jun Chen	VIC
Dr Reece Cordy	VIC
Dr Asha d'Arville	VIC
Dr Caoimhe Doyle	QLD
Dr David Gill	TAS
Dr Yvette Goodgame	WA
Dr Dana Hartley	SA
Dr Courtney Hawthorne	QLD
Dr Kaylee Anne Jordan	TAS
Dr Elizabeth Judson	TAS
Dr Gregory Kalogeropoulos	NSW
Dr Mari Kawamata	VIC
Dr Lada Kordich	QLD
Dr Rebecca Elizabeth Lewis	NSW
Dr Holly Manley	NSW
Dr Joel Matthews	QLD
Dr Ryan McCann	ACT
Dr Danielle McPherson	NSW
Dr Alistair Mitchell	TAS
Dr (Joe) Mohd Ikhwan Mohd Noh	VIC
Dr Rhys Morgan	QLD
Dr Nicole Muir	VIC
Dr Alice Elizabeth Mulcahy	TAS
Dr Ray Paramalingam	WA
Dr Alistair James Park	TAS
Dr Anastasia Pearce	QLD
Dr Alan James Richard Peirce	VIC
Dr Phuong Anh Phuc Pham	VIC
Dr David Paul Phillips	NSW
Dr Gordon Edward Pirie	NSW
Dr Artur Marek Proniewicz	WA
Dr Aslam Rizvi	VIC
Dr Thomas Roberts	QLD
Dr Cameron Nathaniel Rush	VIC
Dr Jacqueline Seebold	QLD
Dr Darren Paul Sherwin	WA
Dr Nisha Singh	QLD
Dr Shaiyla Sivakumar	QLD
Dr Peter Richard Smedley	QLD
Dr Natalie Smith	SA
Dr Nicole Somi	ACT
Dr Dione Stuart	QLD
Dr Justin Shih Sunn Ti	QLD
Dr Sven Reynard Todd	WA
Dr Angela Rachel Tognolini	QLD
Dr Frederick James Achille Torlot	WA
Dr Vaishnavi Vasanthi Sridhar	QLD
Dr Caitlin Mary Weston	NSW
Dr Brianna White	SA
Dr Hannah Wray	WA
Dr Thomas Yang	VIC
Dr Winnie Yu	QLD

IN MEMORIAM

The ASA regrets to announce the passing of ASA members Prof. Ross Beresford Holland, NSW; Dr Richard Barry Wansey, NSW; Dr Chun Wah Chui, SA; Dr Maxwell Thomas Sloss, WA; Dr Noel Morris Cass, VIC.

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

INSIDE YOUR SOCIETY

DR MAXWELL T. SLOSS 1928 – 2017

Dr Maxwell Sloss was a highly respected anaesthetist, teacher, mentor, friend and colleague to generations of anaesthetists in Western Australia. He was a true gentleman whose common sense, knowledge, zest for life and his ability as a raconteur endeared him to all.

Max was born in 1928. He attended Highgate Primary School (1934-40) and Perth Modern School (1941-45) and then obtained a BSc (Chemistry) in 1948 from the University of WA (UWA). He worked as an industrial chemist and research officer from 1948-57 before starting his medical studies at UWA. Max graduated in 1962 and spent two years at Royal Perth Hospital (RPH) before joining the Army (1964-67) and he was an anaesthetist with the Second Field Ambulance Australian Army Force in Vietnam from 1966-1967.

Max returned to RPH as an Anaesthetic Registrar from 1968-70 and attained his FFARACS in October 1970. He entered Private Practice in anaesthesia and had a thriving practice. In addition, he held sessional appointments as a Consultant Anaesthetist at King Edward Memorial Hospital (1971-1973) and RPH from 1971-1986. He had an abiding interest in training and Continuing Medical Education (CME) during his career. In addition to being an active participant in local and national meetings (he and his wife Margot led the organisation of the 1978 ASA Annual Scientific Meeting) Max was:

- Pharmacology Tutor for the Primary FFARACS for many years
- ASA WA Section Committee Member 1972-1979
- ASA WA Section Chairman and Member of ASA Executive, 1978-1979
- WA Faculty of Anaesthetists, RACS, Committee Member 1973-1979
- WA Faculty of Anaesthetists, RACS, CME Committee Member
- Final Examiner FFARACS and then FANZCA for 12 years from 1984
- A member of WA Anaesthetic Mortality Committee in 1980s

Max Sloss was appointed as an Emeritus Consultant Anaesthetist to RPH in November 1986.

Max enjoyed a long and active retirement. His myriad of interests included family, tennis, cricket, French, history, travel, music and reading to mentions a few. Max suffered a stroke and passed away peacefully on 20 March 2017. His wife Margot died a number of years ago. Max is survived by his son and two daughters and their families including seven grandchildren and three great-grandchildren.

Wally R. Thompson
WA RAG Chair

UPCOMING EVENTS

JUNE 2017

NT CME

Date: 3 June 2017

Venue: SKYCITY Darwin

Contact: events@asa.org.au

WA Networking Function

Date: 3 June 2017

Venue: Ellington Jazz Club, 191 Beaufort Street, Perth

Contact: events@asa.org.au

ANZCA/ASA Cable Beach Country Conference 2017

Date: 16-18 June 2017

Venue: Cable Beach Club Resort & Spa, Broome

Contact: events@asa.org.au

ASA/ANZCA NSW Winter CME

Date: 24 June 2017

Venue: Hilton Sydney, 488 George Street, Sydney

Contact: events@asa.org.au

JULY 2017

ACE Rural SIG Meeting 2017

Date: 7-8 July 2017

Venue: Cable Beach Resort & Spa, Broome

Contact: events@asa.org.au

ASA/ANZCA CME - VIC

Date: 29 July 2017

Venue: Sofitel on Collins, Melbourne

Contact: events@asa.org.au

PROFILE: KRIS TORGESON CEO, LIFEBOX

Australian Anaesthetist had a chat with Kris Togeson, Lifebox's new Global CEO.

TELL US A LITTLE ABOUT YOURSELF?

What experiences have you had with anaesthesia and anaesthetists?

First of all, thank you very much for this wonderful opportunity to greet ASA members!

The ASA has been a tremendous supporter of Lifebox's work since our inception just over six years ago. From fundraising to advocacy, introductions to hands on education, you've helped us make a broad and positive impact on safe anaesthesia and surgery in the Western Pacific. Through Lifebox: Australia & New Zealand, our partnerships and Interplast, we've worked in 18 countries across the region and distributed more than 2000 pulse oximeters. Thanks to your incredible commitment to long-term improvement, we've trained several hundred anaesthesia providers in safer surgical techniques, including the WHO Checklist. I come to Lifebox not as an anaesthetist or surgeon, but as someone who has a huge respect for these professions through my own work in global health and humanitarian aid.

After pursuing an academic career in Chinese literature for many years (a story for another day!), I began working for Medecins Sans Frontières/Doctors Without Borders (MSF) in 1998. I had the privilege to serve as Communications Director at MSF USA until 2008, when I took up the post of Secretary General of MSF International until 2012. Before joining Lifebox, I also worked as a consultant with a number of global health organisations, helped set up the US presence of the Alliance for International Medical Action (ALIMA), and returned for a stint with MSF during the Ebola outbreak in West Africa in 2014. My experience with anaesthesia and anaesthetists comes, very simply, from seeing them in action. From Liberia to Jordan, Indonesia to Nigeria, I joined MSF surgical teams providing life-saving care in conflict zones and the aftermath of natural disasters. And every time, in the most difficult conditions, I saw the essential contribution of anaesthesia.

WHY WORK WITH ORGANISATIONS LIKE LIFEBOX?

In addition to having an uncle who was a surgeon and encouraged me to take up the profession (luckily my cousin did!), I have had the opportunity to meet an incredible number of inspiring clinicians who have influenced my decision to work in global health. The Australian surgeon, Rowan Gillies, who I worked with during his time as International President of MSF, is a good friend and personal mentor and was incredibly supportive of me joining Lifebox.

WHY THE MOVE FROM MSF?

After nearly 15 years with MSF, I wanted to see if I could use what I had learned to focus on an area of global health that wasn't receiving the attention I felt it deserved or needed. I also hoped to use my skills to help increase the impact of a small organisation with a strong mission. When the opportunity with Lifebox appeared, I saw it as a perfect fit.

Following the Lancet Commission on Global Surgery in 2015, and the World Health Assembly Resolution the following month, we are finally seeing surgery and anaesthesia on the global health agenda. Unfortunately, that has not translated into an improvement in conditions on the ground in low and middle income countries. Lifebox is one of the only non-profits in the world dedicated to working with anaesthesia and surgery providers in resource-limited settings, providing them with the tools and training needed to increase the safety of care they provide. By remaining very focused on this single mission – safe surgery and anaesthesia – and by working in an approach that joins professional societies around the world, I find Lifebox's model compelling and impactful.

WHAT'S SURPRISED YOU MOST ABOUT THE ORGANISATION?

I think the biggest thing is how small the actual Lifebox team is, considering the breadth and depth of its impact! With just a handful of dedicated team members in London and by tapping into enthusiastic board members and volunteer supporters around the world – including many ASA members – Lifebox has been able to deliver pulse oximetry and training in more than 100 countries, and made anaesthesia and surgery safer for millions.

WHAT DO YOU SEE AS THE BIGGEST CHALLENGE LIFEBOX FACES?

What can ASA members do to help?

Unfortunately, many people still think that surgery and anesthesia are 'luxuries' that are only possible in wealthy contexts. So to me, the biggest challenge is the huge unmet need for improved safety in the perioperative care provided on a global scale. Because we know that millions of operations are taking place in low-resource

settings – when it comes to life-saving procedures like C-sections and trauma repair, healthcare workers and patients have no other choice.

The reality is, we are nowhere near the goal of 'making it zero' on the number of operating rooms that still do not have pulse oximetry. Surgical site infections are still one of the largest sources of mortality and morbidity in Sub-Saharan Africa and elsewhere. We don't even know with confidence the numbers we need to reach to ensure that surgical patients are treated with the international standards of safety.

This is where the ASA can really help Lifebox – by insisting that safe surgery and anaesthesia are not luxuries, but an essential part of any healthcare system. And that by providing simple tools and techniques, we can help our colleagues in resource-limited settings provide improved care. The ASA has an incredibly important role to play in raising awareness and resources in Australia (donations made through Lifebox are tax-deductible) – but also linking with organisations like anaesthesia provider societies in other countries where you have connections, to help support them close the safety gap once and for all.

PLANNING TO CARRY ON ANY STRATEGIES FROM MSF & ALIMA?

Shake things up a little?

Ha! That is a great question. I don't think Lifebox needs a lot of shaking up. They are a pretty dynamic bunch already! What I do hope to do is to use my background in non-profit programme management and growth to build on Lifebox's success to date and scale up its impact. I believe working with professional societies is critical to that – and one of the keys to Lifebox's impact.

I also hope to look at ways we can increase our efficiency in providing low-cost and environment-appropriate adapted medical tools, like the Lifebox pulse oximeter – ones that don't contribute to the 'instrument graveyard' we see in so many low-resource country surgical wards.

WHAT DO YOU WISH NON-ANAESTHETISTS KNEW ABOUT LIFEBOX?

I wish they knew how immediately, by providing the basic tools and training, the safety and outcomes of surgery and anaesthesia can be enormously improved – even in settings where conditions are minimal compared to standards we are used to in Australia or the US. A pulse oximeter, adequate lighting during surgery, training on the WHO Safe Surgery Checklist, techniques for reducing surgical site infection – these are all simple actions that can be taken at low cost and dramatically improve the conditions for life-saving treatment.

WHO HAVE YOU MET SINCE STARTING WITH LIFEBOX?

That is a tough question. I guess one of the most impressive is a nurse anaesthetist I met in Zambia last month named Catherine. When I arrived at Kafue District Hospital, she had her Lifebox pulse oximeter in hand and was using it to monitor a young patient in the recovery room of the operating theatre. She immediately showed me how "handy" the instrument was, and then rushed off to prepare for the next surgery. She gathered her colleagues and a copy of the WHO Safe Surgery Checklist to show me how she led the team through the Checklist during each operation. I was impressed not only with her energy and spirit, but how this little pulse oximeter she could carry around in her pocket, not just in the theatre but in recovery and, when necessary, the wards, helped her provide better care for her patients. It also helped her take the lead in her surgical team, to improve the safety of perioperative care in their very limited resource hospital.

WHAT'S YOUR PERSONAL PHILOSOPHY ...

on addressing unsafe surgery and anaesthesia worldwide?

My personal philosophy comes from my grounding in the humanitarian belief that assisting a single human being during a tough period in their life is of great value. Providing safe surgical care is the ultimate humanitarian act, as it can only be done one patient at a time, and only by a team working together. By reaching across time zones and borders, individual anaesthesia and surgical providers can help others by supporting training, equipment, and the advocacy needed to ensure that a team is not working entirely alone.

WHERE'S LIFEBOX 5 YEARS FROM NOW?

To put it simply, I hope that over the next five years we see safe surgery and anaesthesia climb much higher on the global health agenda – dedicated resources that bring us to the point that non-profits like Lifebox, and professional organisations like the ASA, can have a much greater impact working with partners for the benefit of entire populations.

I hope that we will see real improvement in lowering the numbers of patients treated in unsafe conditions. And I believe that in turn will increase access to life-saving care for millions of people around the world, who look around right now and can't see a fair chance for their own health, their families and their communities.

CONTACT

For more information about Lifebox, visit www.lifebox.org or follow them on Twitter @SaferSurgery.

DONATE

To make a tax-efficient donation via the Australia & New Zealand project, visit: http://ow.ly/metP30bCEzS

AUSTRALIAN SOCIETY OF ANAESTHETISTS

ADVANTAGE PROGRAM

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ASA

Australian Society of Anaesthetists

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