November 17, 2017

Ms Rosalind Wendt  
Trauma Program Coordinator  
Fellowship Services Department  
Royal Australasian College of Surgeons  
By email: trauma.verification@surgeons.org

Dear Ms Wendt,

Re: Invitation to submit information for New Zealand Trauma system review

Thank you for the opportunity to provide feedback on the above consultation. As you will know, the Australian and New Zealand College of Anaesthetists (ANZCA), which includes the Faculty of Pain Medicine, is responsible for the training and examination of anaesthetists and pain medicine specialists and for the standards of clinical practice in New Zealand and Australia. ANZCA’s mission is to serve the community by fostering safety and high quality patient care in anaesthesia, perioperative medicine and pain medicine.

Members of ANZCA’s New Zealand National Committee (NZNC) have considered the consultation, and would like to provide the following feedback on New Zealand’s trauma system.

1. **Strengths of New Zealand’s Trauma System**

   - The establishment of the Major Trauma Clinical Network in New Zealand has facilitated improvements in trauma care in terms of data collection, an overview of trauma capabilities in smaller centres, and coordination of care. The Network is beginning to gain traction with projects such as spinal cord impairment policy, prehospital destination policy, and the major trauma registry.
   - The NZNC strongly supports the data collection established as part of the New Zealand Major Trauma Registry, including measures such as patient demographic data, and prehospital process measures such as time of arrival in hospital, and number of transfers required. The Registry establishes an important baseline dataset, so that patient outcomes can be analysed according to patient care variables, and so changes implemented in trauma care services can be monitored for efficacy.
   - Overall, a major strength of New Zealand’s Trauma System is that it is well-supported by a strong public health system, with universal coverage for cost of injury, rehabilitation and income protection under the Accident Compensation Corporation.

2. **Opportunities for improving New Zealand’s Trauma System**

   **Improving hospital services:**

   - It would be beneficial to reduce fragmentation of surgical services within tertiary trauma hospitals. Currently, only Waikato and Christchurch have all major surgical specialties onsite.
   - There is significant over-demand for intensive care resources currently, with a number of intensive care units operating at or near capacity. How to address this issue will need to be considered.
   - The success of a national trauma system is based on management of severely injured patients by senior medical staff working in a coordinated manner. ANZCA considers this already exists in New Zealand, and anaesthetists are motivated to develop pathways with colleagues to further improve this.
• ANZCA considers that committees reviewing patient care from arrival to completion of acute care, should include anaesthesia representation. Anaesthetists can have a key role in coordinating the care of patients under local trauma pathways, within and outside the operating room.

Trauma care outside metropolitan areas:
• The level of trauma care available outside major metropolitan areas needs to be reviewed, to make sure that trauma patients in remote areas have as good a chance of a reasonable outcome as trauma patients in metropolitan areas. We are pleased to see the introduction of the New Zealand Major Trauma Registry which should see important outcome data become available, and will inform review of differences in outcomes regionally.
• When examining service provision in rural and remote areas, the level of service available and reliance on volunteer-based services needs to be assessed.
• It should also be considered whether first responders (such as ambulance services) have access to appropriate resources, staffing and skill levels for trauma care. Regular and ongoing training should be available for first responders.
• We are aware that regional trauma networks have already been established. The operation of communication networks and support systems throughout these networks should be considered, including how available technology such as telemedicine can best be utilised, and ensuring clear inter-DHB referral pathways for trauma patients are established, including a single point of entry, to minimise the need for multiple phone calls when arranging patient transfers.

Interprofessional training:
• Increased interprofessional collaboration and training for trauma teams would be beneficial, including anaesthesia, emergency medicine, intensive care, and surgery. Operating room simulation training could be established for trauma teams using a model like the University of Auckland’s MORSim programme. As MORSim is being rolled out nationally, the simulators and surgical models provided as part of this could be used by other groups such as trauma teams to promote teamwork and undertake regular drills.
• Inter-professional training is a vital part of improving communication between groups, as demonstrated by the success of the Emergency Management of Severe Trauma course run by RACS.
• Further development of the Definitive Anaesthetic Trauma Care (DATC) course would be useful, to educate anaesthetists, surgeons and nurses in coordinated management of severe trauma.

3. How anaesthetists currently contribute to the New Zealand trauma system:
• Clinically, anaesthetists are an important part of the trauma team in most hospitals in the early phase of care. Anaesthetists have an essential role in providing airway management, damage-control resuscitations, leadership and decision-making, advanced analgesia, and intraoperative care. Also, a significant number of regional and provincial hospitals do not have full-time intensivist cover, and anaesthetists largely provide that service in those hospitals.
• Anaesthetists also provide clinical leadership via involvement in local, regional and national trauma committees, and some are involved in trauma education, such as DATC courses.

4. Anaesthesia’s future contribution to New Zealand’s trauma system:
• Anaesthetists will continue to make an essential contribution to the care of trauma patients in New Zealand, including early management of patients after arrival in hospital, and facilitating early access to surgery.
Anaesthetists will have an increasing role in perioperative medicine, including aspects of postoperative care such as acute pain management, preventative care, mobilisation and early rehabilitation.

There may be increased involvement in interventional radiology and/or hybrid operating theatre suites, as seen in other areas of medicine such as neuroradiology, endovascular surgery, and cardiology. Operating in an environment remote to the traditional operating theatre carries significant challenges that will need to be managed.

As the population ages, it can be expected that older patients will be more frequently represented in trauma cases. Anaesthetists will have an essential role in managing the elderly, comorbid trauma patient, from a perioperative medicine perspective.

Anaesthetists have developed group Crisis Resource Management training systems in trauma management in the operating room, and would be ready collaborators in widening this to the continuum of acute care of the trauma patient.

Thank you once again for the opportunity to comment. You are welcome to contact me with any questions. Please contact Virginia Mills (Senior Policy Advisor) in the first instance, at vmills@anzca.org.nz or on 04 499 1213.

Yours sincerely

[Signature]

Dr Jennifer Woods
Chair, New Zealand National Committee