

20.06.22

Select Committee on the Response to Major Flooding across New South Wales in 2022  
Floods@parliament.nsw.gov.au  
Sydney NSW 2000

Dear Commissioners,

Re: SUBMISSION TO THE ROYAL COMMISSION ON THE RESPONSE TO MAJOR FLOODING ACROSS NEW SOUTH WALES IN 2022

## **BACKGROUND**

In February and March 2022, the eastern region of New South Wales saw one of the worst flood disasters on record. Compounded by COVID-19, there has been significant decrease in surgical care which has affected our trainees accessing surgical cases by comparison to those trainees entering the program three years ago. Such unpreparedness and reduction of elective surgery have been further exacerbated by the floods, and a lack of surgical beds given to flood victims.

## **SUMMARY OF ISSUES**

RACS surgeons, trainees and regional patients are facing “healthcare disparities’ due to the suspension of surgical services which has impacted ‘elective surgery’ inclusive of oncological procedures in places like Lismore NSW. Feedback from local surgeons and trainees, as well as input from the Rural Surgery Section highlights concerns in:

- the need to improve emergency responses to natural disasters in NSW,
- the potential dire state in the delivery and assisting surgical healthcare to vulnerable regions,

## **IMPROVING EMERGENCY RESPONSES TO NATURAL DISTASTERS IN NSW**

Surgeons and surgical trainees are subject to extraordinary physical, psychological and professional demands during emergency responses to natural disasters and other mass casualty events. Formal support structures are essential for disaster preparedness. An effective and holistic strategy is needed to ensure workforce sustainability and protection of staff at- risk of immediate and long-term effects of exposures including infectious diseases, severe trauma and system capacity overload.

RACS therefore provides the following comments as an important stakeholder in dealing with both the short-term and long-term impacts of floods & other natural disasters.

### **1. Surgical capacity in response to areas severely impacted by flooding**

The two main issues from a surgical perspective that came out of the recent floods were:

- Outsourcing of surgical cases.
- The lack of surgical beds.

As towns in northern NSW were severely impacted by flooding, we saw an increase of surgical cases being outsourced to larger hospitals in the area. In an area that has already seen a significant decrease in surgical care due to COVID-19 elective surgery care pauses, this is problematic in providing care to the local community.

The lack of surgical beds is a direct result of the local flood response. Residents who had been displaced from their personal accommodation were offered temporary accommodation in the hospital setting. This significantly impacted the ability to provide care to the local community and certainly limited the capacity of surgical care.

### **2. Australian Trauma Verification and Registry**

Within the context of natural disasters of the scale just experienced via the floods, a verified trauma system is the best way for Australia to manage surgical casualties. Trauma verification is a multidisciplinary process of evaluation of prehospital triage, transport, hospital management and rehabilitation of injured patients. The Australian Trauma Verification program is led by the Royal Australasian College of Surgeons with direct support

from the Australian New Zealand College of Anaesthetists, the Australasian College of Emergency Medicine, College of Intensive Care of Australian and New Zealand, and registered nurses and allied health practitioners.

### **3. Retrieval of large numbers of casualties from natural disasters.**

Video telecommunication can assist in triage and patient management. However, those triaged for surgical intervention in a specialist centre need to be retrieved, which in the case of a flood might be from a remote location. This means there must be established networks of services that have proven communication and transport ready to utilise at very short notice. To remain prepared, these networks would undergo frequent rehearsal. This is the value of NTCCRC/AUSMAT.

Training standards of their teams have been credentialed by the World Health Organization and Australian Council for Health Care Standards. Hospitals must be able to have advanced warning and have hospital wide protocols in place to clear beds and theatres to receive casualties. This too is the value of Trauma verification (credentials training) and Trauma Registries which allows planning for future events. Surgeons have demonstrated their capacity to work collaboratively.

## **DELIVERING AND ASSISTING SURGICAL HEALTHCARE TO VULNERABLE REGIONS**

### **1. Longer-term health impacts as a result of the NSW floods which may require surgical intervention**

Surgeons play leading roles in treating the immediate health impacts of natural disasters. According to various global studies drowning is the most common cause of death by floods. However, injuries can range from “minor cuts and lacerations caused by falls” to in some cases serious fractures. It has been noted that most injuries relate to the clean-up as opposed to flood impact, with disease and wound infection culminating from contaminated water and malfunctioning of air-conditioning and heating.

Survivors of flooding have to contend with “complex limb fractures, soft tissue injury and penetrating trauma from broken glass, wood shards and other floating debris.” Injury patterns following natural sudden-onset disasters (SODs), and a rapid needs assessment (RNA) require contextual understanding based upon the uniqueness of a particular regional terrain and existing infrastructure weaknesses. In another global study, the delivery of surgical assistance in vulnerable areas for trauma care has emphasised the importance of general surgeons, as well as orthopaedic and plastics surgeons when undertaking “lengthy, costly and technically demanding limb reconstruction procedures.”<sup>1</sup>

It is yet to be determined if there will be long-term consequences of prolonged effect of infections, due to contaminated water and debris from the floods. Only ongoing research will determine if this is the case and will require future resources.

### **2. Climate change and other global risks**

In February 2018, the Royal Australasian College of Surgeons published a position paper titled ‘Environmental Impact of Surgical Practice’. RACS notes the Australia-based Commission for Human Future recently identified global warming/climate change as just one of ten threats confronting the world. NSW has certainly felt the impact of climate change via the recent flooding and the 2019/2020 bushfires.

Healthcare is an important component and as surgeons we have been forced into this space by the natural disasters in NSW. We are reporting back to the Royal Commission about our experience in the field and the challenges we face.

## **RECOMMENDATIONS**

### **WE RECOMMEND**

- Establish a framework of medical emergency systems, which are integrated, benchmarked for performance, based on national standards/guidelines including triage and regularly tested for capacity. Better use needs to be made of AUSMAT and its approved standards.
- Commonwealth and State jurisdictions to be able to collaborate in declaring an emergency and overseeing the response.
- Commonwealth funding to support the regular conduct of state trauma reviews via the Australasian Trauma Verification program
- Material support for the maturation of the Australian Trauma Registry to benefit the timely provision of accurate detailed injury data
- For the benefit of both emergency and medical teams, flood proof rural video telecommunication systems.
- Commonwealth and State Governments to work collaboratively with the Royal Australasian College of Surgeons to improve access to appropriately trained and resourced surgical services in rural/flood-prone areas. This will improve resilience.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M Atkinson', with a large, stylized initial 'M'.

Dr Michelle Atkinson  
RACS NSW State Committee Chair

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i Sofia Bartholdson<sup>1</sup> & Johan von Schreeb., 'Natural Disasters and Injuries: What Does a Surgeon Need to Know?' *Current Trauma Reports* (2018) 4:103–108, see pp. 105-106  
<https://doi.org/10.1007/s40719-018-0125-3>

