Critical care medicine in Australia and New Zealand: an extraordinary decade

A little more than 10 years ago, critical care specialists in Australia and New Zealand could be justly proud of many important achievements:

- a vibrant professional society, the Australian and New Zealand Intensive Care Society (ANZICS), which coordinated activities and ran a lively annual scientific meeting;
- a well-deserved reputation for clinical excellence;
- an established and respected position within the various specialties in the two countries;
- an excellent training program, which allowed trainees in anaesthesia and internal medicine trainees to become critical care specialists through the Australian and New Zealand College of Anaesthetists and the Royal Australasian College of Physicians, respectively;
- continuing expansion of the size, number and technological quality of intensive care units;
- the ability to treat patients in these units according to a model of care centred around the intensivist as the coordinator, gate-keeper and final prescriber of therapy within the unit (the so-called “closed model” in Northern American parlance);
- the widespread acceptance of the concept of one nurse to one critically ill patient; and
- a fast-growing, increasingly sophisticated database, which sought to quantify illness severity on ICU admission and final outcome for as many patients in Australian and New Zealand ICUs as possible.

These important achievements were recently reviewed.¹

However, this mosaic of achievement still had some missing pieces. Arguably, most important was the fact that Australian and New Zealand critical care specialists were not setting the agenda for practice and clinical research on the world stage. Instead, this agenda was set in the United States, Europe, or even Canada, and was then considered, and either rejected or applied locally if we considered it sensible and relevant. This situation did not seem to reflect the knowledge, skills, intellectual content, clinical practice and overall structural strength of critical care medicine in Australia and New Zealand. A change was needed, and the context was right: mutual respect and collaboration already existed; teamwork was more valued than personal prestige; communication was made much easier by fax and email; and evidence-based medicine was expanding its ideological success. It was clear that, for intensivists in Australia and New Zealand to make a difference and set the worldwide agenda, they had to become trialists, and the ANZICS Clinical Trials Group (CTG) was born. The amazing success of this group deserves an article of its own; here, it is only necessary to remind Australian and New Zealand intensivists that, through the CTG, we have gone from having no patients entered into multicentre, randomised controlled trials to having more than 12 000.²⁻⁵ We have now randomised more patients to non-pharmaceutical industry-sponsored trials than any other group in the world,¹ both on a per capita basis and in absolute terms. In short, in a mere decade, we have become “number one”. Not bad at all for two countries with a combined population of fewer than 25 million people.

If this was not enough, we have also developed a vibrant, interactive annual meeting, held in Noosa, Queensland, where attendance has quintupled over the decade. Yet other important developments have taken place this decade, which could fairly be described as the renaissance of critical care medicine in Australia and New Zealand. The specialty has been recognised as a separate field of funding by the National Health and Medical Research Council (NHMRC) in Australia; it has obtained close to 10 million dollars in grants from the NHMRC and the New Zealand Health Research Council; and it has been funded to develop a separate intensive care research centre, the ANZIC-RC, which has already initiated our first phase II trial and has received our largest NHMRC grant yet to conduct this trial — ARISE, a randomised controlled trial of early goal-directed therapy versus standard care in patients with severe sepsis presenting to the emergency department. We have developed formal collaborations with the Australian College of Emergency Medicine and the Canadian Critical Care Clinical Trials Group, and are developing a collaboration with US investigators in relation to the ARISE trial; we have developed a now long-standing and incredibly successful partnership with the George Institute for International Health and a new partnership with the Department of Epidemiology and Preventive Medicine at Monash University; we have created a funding body that can help develop new ideas for trials by funding early clinical research (the ICU Foundation); we have acquired full-time or part-time research coordinators; we have expanded the reaches of the ANZICS Database⁶ by encompassing almost all ICU admissions, producing even more sophisticated reports,
moving into the field of quality and safety, and producing high-quality articles; and we have created a single Faculty to supervise our training. Finally and most relevant here, we have developed a journal that is our own, and reflects our concerns, ideas, perspectives and practice — *Critical Care and Resuscitation*. By any criteria, this has been a manic decade for Australian and New Zealand critical care medicine, a decade that has seen achievements that no other specialty has been able to emulate.

What next? Are we going to disintegrate into factions that fight each other into oblivion, as the Italian principalities did at a similar stage 500 years ago? Will the CTG, the ANZIC-RC, the George, the ICU Foundation, the Faculty, ANZICS and the ANZICS Database Management Committee turn into the equivalents of Florence, Milan, Rome, Parma, Verona and Venice, and vie for control of the agenda? Or can we continue to work together? Is the agenda complete? Is fatigue setting in? Have we run out of steam? Or are we going to last? As the saying goes, one should “never prophesy, especially about the future”. Nonetheless, it is clear to me as the new Editor of *Critical Care and Resuscitation* that the agenda is not finished. We need:

- to establish the ANZIC-RC as a permanent centre of ICU research for Australia and New Zealand;
- to prepare young intensivists for the task of developing high-quality evidence;
- to create collaborations with bodies that have expertise in molecular biology and experimental physiology so that intensive care trainees and research can move into these fields;
- to take evidence-based medicine to the countries in our region;
- to develop the links that will allow large randomised, controlled trials to take place in the increasingly numerous and sophisticated ICUs of Asia; and
- to integrate our bodies into a joint strategy that expands what we have into another decade of achievement.

This will be the agenda of the Journal under my stewardship: to give Australian and New Zealand critical care medicine a voice with international resonance, a voice that will help us to forge new collaborations in Asia, as well as to increase the strength of those we already have.

The Journal has moved from a dedicated start under Tub Worthley, Founding Editor, to PubMed indexation under Vernon Van Heerden, my predecessor. The next step is to acquire an impact factor. The goal over the next decade is to take such an impact factor into a range that is competitive with European and US journals. Critical care medicine in Australia and New Zealand needs a voice that reflects what we have become: no longer a child, we have gone to university. The increasing number (35 in the past 3 months) and quality of submissions to the Journal is a testimony to this evolution. May the next decade be one of further growth and collaborative effort for us all, and may the Journal be an important tool to facilitate this.

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**References**

1 Bellomo R, Stow P, Hart GK. Why is there such a difference in outcome between Australia intensive care units and others? *Cur Opin Anaesthesiol* 2007; 20: 100-5.