Critical care reaching out (further) to help?

Jeffrey Presneill

Critical care medicine has existed in the world in a recognisable form for about 70 years,[1] beginning with the first description of an “anaesthesiologic observation unit” developed for the 1952–1953 Copenhagen poliomyelitis epidemic.[2] Within a very short time, other European and North American reports appeared describing upgraded recovery rooms treating patients with coma, shock or poisoning, and resuscitation emergencies. These new hospital services had elements of triage, rapid treatment and concentrated care, and were soon accommodating an ever larger count of patients with higher levels of acuity within a system formerly designed to care for stable patients.[3]

Australia and New Zealand were relatively early adopters of these ideas,[4,5] although perhaps without as much segregation into surgical subspeciality units as was seen overseas. Since those early days, Australian and New Zealand intensive care units (ICUs) have innovated in many areas of critical care practice, including staffing, organisational governance, multicentre randomised research trials and the collection of binational ICU patient data within shared Australian and New Zealand Intensive Care Society Centre for Outcome and Resource Evaluation (ANZICS CORE) Registries.[6,7] Repeatedly, Australian and New Zealand ICU patient outcomes match or exceed world benchmarks,[6] with a very recent example being the favourable probability of survival after ICU admission of Australian adults with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.[8]

Perhaps more than some other clinical specialties, expansion has been the watchword of critical care since the very early days. Those clinicians who developed the first ICUs would be amazed by the extent and cost[9] of current Australian and New Zealand ICU resources. At present, over 200 ICUs across Australia and New Zealand admit over 200 000 adult and paediatric ICU admissions annually.[7] Advanced age[10] does not prevent ICU admission, nor does malignancy.[11,12]

Australian and New Zealand ICU practice has made notable contributions both to the development of the concept of a hospital Medical Emergency Team (MET) and Rapid Response Team (RRT) and to the early widespread adoption of this concept,[13] where a team of clinicians, typically ICU-based, provide a safety net for potentially deteriorating patients outside the ICU. The clinical utility of such a hospital rapid response to at-risk patients outside the ICU seemed from the beginning to be self-evident. However, the process, like many complex health services, proved challenging to study[14-16] and standardise,[17,18] with ageing hospital patient populations, their prevalent comorbid conditions, and end-of-life care now important factors in the evaluation of MET effectiveness.[19]

In addition to MET and RRT, many Australian and New Zealand ICUs also provide ICU outreach and liaison nurse services, where senior intensive care nurses review the management of patients with complex care needs following their discharge from the ICU, or after MET events where the patient stays on their own hospital ward.[20]

In this edition of *Critical Care and Resuscitation*, the Austin Health Critical Care Outreach Physician (CCOP) Investigators[21] report the tasks completed and staff perceptions of another role, that of a CCOP. Although such ICU outreach physician roles have existed in some form for about two decades, especially in the United Kingdom,[22,23] the description of the features and perceptions of a CCOP role, implemented during daylight hours Monday through Friday at an Australian teaching hospital, is a welcome contribution to the scientific literature around critical care outreach services within the unique Australian and New Zealand system. As described, the role most commonly involved emergency department visits, direct consultant communication, coordinating ICU admissions, and support for the hospital MET system. Staff members who responded to survey questions after the new role had been operating for 5 months rated most highly the CCOP role in supporting the MET staff, coordinating simultaneous emergencies outside the ICU and providing senior clinical input into clinical decisions for deteriorating patients outside the ICU.

Medical expansionism as a health sociological concept describes the increasing access to more medicine and medical care that has been so prominent in Western societies

since the latter half of the 20th century.[24] This phenomenon has been accompanied by rising health care costs, a greater count of hospitals, and a much larger and increasingly specialised clinical workforce. A concern accompanying this expansion is the extension of complex and costly medical treatments to "non-medical problems".[19,24,25] Does the CCOP role, as the latest Australian and New Zealand ICU example of medical expansion, improve health through increased life expectancy, decreased mortality rates, or more subtle but still worthwhile aspects of patient-centred outcomes, such as improved end-of-life care and ICU triage? It is too early to know. What is certain is that this aspect of Australian and New Zealand ICU clinicians reaching out to help patients beyond the ICU walls deserves to receive as much study and rigorous evaluation as does the ongoing assessment of the MET system.

Competing interests

No relevant disclosures.

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