



5 THINGS

CLINICIANS AND CONSUMERS SHOULD QUESTION

Developed by the College of Intensive Care Medicine of Australia and New Zealand and the Australian and New Zealand Intensive Care Society

1

For patients with limited life expectancy (such as advanced cardiac, renal or respiratory failure, metastatic malignancy, third line chemotherapy) ensure patients have a 'goals of care' discussion at or prior to admission to ICU and for patients in ICU who are at high risk for death or severely impaired functional recovery, ensure that alternative care focused predominantly on comfort and dignity is offered to patients and their families

The ANZICS Statement on Care and Decision Making at the End of Life for the Critically Ill states that the goal of intensive care is to return patients to a quality of life that is acceptable to them. In order to achieve this goal, it is essential that clinicians explore the values and preferences of each patient. Engaging with patients and their families in the discussions around treatment limitations or withdrawal can improve the quality of dying and reduce family and staff stress and bereavement.

2

Remove all invasive devices, such as intravascular lines and urinary catheters, as soon as possible

Patients in the intensive care unit often require invasive devices as part of their treatment as well as monitoring of therapy. These lines however are a potential source of healthcare related infections. Preventative "bundles" of care including simple measures such as hand hygiene and aseptic methods of insertion and care of devices have reduced the risk of health care related infections. Infections related to invasive devices are a significant cause of morbidity and mortality. Hence, all invasive devices such as arterial lines, central lines, urinary catheters should be removed as soon as possible.



3

Transfuse red cells for anaemia only if the haemoglobin concentration is less than 70gm/L or if the patient is haemodynamically unstable or has significant cardiovascular or respiratory comorbidity

Numerous studies have highlighted the adverse outcomes that may be associated with blood transfusion. Randomised and other trials have indicated that transfusion of red blood cells for the treatment of anaemia in otherwise haemodynamically stable patients is either of no benefit or even harmful. There appears to be little or no proven benefit of transfusing beyond a threshold haemoglobin level of 70gm/L though the precise threshold for any given patient is unknown. Patients with active cardio-respiratory disease or neurological injury may warrant a higher threshold although harm associated with liberal transfusion in this group has also been reported.

4

Undertake daily attempts to lighten sedation in ventilated patients unless specifically contraindicated and deeply sedate mechanically ventilated patients only if there is a specific indication

Critically ill patients requiring mechanical ventilation are frequently treated with sedatives and analgesics, to treat pain, anxiety, dyspnoea and reduce tissue oxygen consumption. However prolonged or excessive sedation can be associated with delirium, critical illness weakness, prolonged ventilation and length of stay. Protocol-based approaches to limit deep sedation, by explicating titrating the sedation to a sedation goal, and daily interruptions of sedation, have been shown to improve patient outcomes, including a reduction in mortality. Exceptions to the daily sedation holiday are for patients requiring muscle paralysis, who should not be woken until the paralytic agent has worn off.

5

Consider antibiotic de-escalation daily

Infection can precipitate a need for intensive care admission and can occur as a complication of an ICU admission. The earliest administration of the most appropriate antibiotic and source control confer mortality benefit. However, antibiotics are also frequently used for the presumptive management of patients with 'sepsis' that may later prove to not have an infectious aetiology. In most circumstances, data regarding the appropriate duration of antibiotic administration are very difficult to interpret. In some conditions such as endocarditis or osteomyelitis longer courses of antibiotics have been recommended. However, there is increasing evidence that shorter courses of antibiotics for common infections such as hospital acquired pneumonia do not confer worse outcomes or increased mortality than longer courses. Moreover, shorter courses probably help to prevent the development of antibiotic resistance. In the absence of microbiological evidence of ongoing infection and with an improvement in clinical status, consideration should be given to discontinuing antibiotics at the earliest opportunity possible.

SUPPORTING EVIDENCE

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HOW THIS LIST WAS MADE

A working group of interested parties from both CICM and ANZICS was formed to develop a list of 12 items that they believe should be focused on to reduce the number of unnecessary tests and interventions performed in intensive care. All CICM Fellows and ANZICS members were surveyed to develop a consensus view of a final list of five items. There were 6 items clearly favoured and two of these were combined by the working group to develop the final 5 recommendations.

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About the College of Intensive Care Medicine of Australia and New Zealand and the Australian and New Zealand Intensive Care Society

CICM is responsible for intensive care medicine specialist training and education in Australia and New Zealand. ANZICS is the leading advocate on all intensive care related matters.

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