



Framework to guide decision making on the appropriateness of intensive care management during the COVID-19 pandemic

Background

Intensive Care Unit (ICU) capacity is a finite resource. Under normal working conditions decisions are made regularly regarding appropriate admission which takes into account likely benefit, potential harm and burden of treatment, as well as societal resource availability.

Decisions will be made in the context of operational approaches to reduce routine ICU demand, identify and increase physical ICU bed space capacity throughout the health system, and determine associated equipment and workforce requirements. A safe and sustainable working environment for staff may impact on available ICU resources.¹

Purpose

The purpose of this document is to:

- Provide a clear and transparent framework for decision-making regarding admission to an area providing ICU-level management and the continued provision of ICU-level management for all patients irrespective of their COVID status, noting this may be provided in a range of locations and hospitals, including regional centres, that do not usually provide ICU-level management.
- Provide a standardised process for achieving a final clinical decision regarding which patients are most likely to benefit from the admission to, and the continued provision of, ICU-level management. Important considerations in the decision-making process may overlap and include expected current life-expectancy, frailty and co-morbidity, acute severity of illness, response to current treatment, and likely response to further treatment.
- Ensure appropriate conduct and timing of end-of-life discussions with institution of high-quality palliative care if and when necessary.

Ethical principles underlying ICU management during a pandemic in Western Australia

ICU management is provided to selected patients with potentially reversible critical illness. Critical illness is defined as any immediately life-threatening illness. The objective of any admission to ICU is to achieve an extended survival with a quality of life that is regarded as acceptable to the patient. Routinely, where treatments are deemed futile or of minimal benefit by senior clinicians,

it would be common practice for them not to be instigated or to be withdrawn. It is possible that, during a pandemic, demand from patients where these goals are achievable will exceed supply. In this situation there are potentially competing ethical imperatives. While under usual circumstances individual autonomy is often prioritised, during a pandemic, issues of distributive justice and societal benefit may need higher prioritisation. At all times, quality of communication and transparency of decision-making are imperative, as is the concept that all patients receive care that is evidenced based, compassionate and holistic.

Intensive care physicians are best positioned to make decisions regarding the likely benefit of provision of ICU-level management. They have years or decades of experience with the management of critically ill patients. The views and opinions of referring clinicians, such as emergency and respiratory physicians are also highly relevant and should be considered during decision-making.

1) Timing of consideration of appropriateness for ICU-level management

At time of first presentation all patients who may progress to develop critical illness or have critical illness should be categorised as:

- Definitely appropriate for ICU-level management
- Possibly appropriate for ICU-level management
- Definitely not appropriate for ICU-level management

Where patients are designated as possibly appropriate, this status should be reviewed frequently and updated to appropriate or not appropriate as soon as possible. These decisions are not irrevocable but can and should be updated based on revised information available at the time or change in clinical circumstances. This applies to non-COVID-19 patients as well as patients with suspected or confirmed COVID-19 infection.

For patients who are intubated prior to arrival to an Emergency Department (ED), a review of whether it is appropriate to admit the patient for ICU-level management should occur in the ED. If care with palliative goals is deemed appropriate, palliation could commence in the ED, ward or pre-hospital setting, and does not need to commence in an ICU.

Categorisation of patients at a given point in time may vary depending on ICU resources available in the health services.

2) Assessment of factors that influence decision-making regarding provision and continuation of ICU-level management

Multiple factors must be simultaneously taken into account to determine the value of both the commencement and the continued provision of ICU-level management. There are no explicit criteria, formulas or scores that can be reliably applied for this purpose. It is the holistic combination of factors, best assessed by an experienced clinician. During a pandemic, it is vital that communication occurs as early as possible after presentation between clinicians and their peers, in the same and other hospitals, to ensure equity of application of these principles, which include;

- Patient Goals-of-Care. Some patients may not wish to receive advanced life-support and ICU-level management must not be provided to such patients.
- Age should not be a sole discriminator when considering ICU triage, however older patients often have lower life expectancies with many chronic and end-stage comorbidities.

Therefore, subsequent life-expectancy, if admission to ICU was necessary and successful, should be taken into account.

- Frailty, co-morbidity and likely duration of ICU management are known to adversely affect outcome after admission to ICU.
- Severity of current illness also influences the likelihood of successful outcome following provision of advanced life-support and should be taken into account. Failure of some organ systems (respiratory, cardiovascular, renal, cerebral) are potentially reversible but the number of simultaneous organ failures reduces the likelihood of successful outcome. Failure of some other organ systems are less reversible (structural brain lesions, death of myocardium). Potential reversibility should be taken into account.
- Availability of and response to treatments is an important predictor of successful outcome. This applies both to trajectory of deterioration and response to treatment prior to referral for ICU-level management, as well as response following the commencement of ICU-level management.

It should also be noted that provision of ICU-level management is always regarded as a 'trial of treatment'. Where there is insufficient response to treatment, the appropriateness of continued treatment will be considered on an ongoing basis.

3) Process for decision-making

Where there is not a clear trajectory for a patient's disposition, decisions regarding the appropriateness of ICU-level management should be made as early as possible and by at least two senior clinicians (with at least one clinician always being from intensive care). All subsequent decisions must be transparent, clearly documented and in accordance with the principles outlined in this document.

Each institution should routinely utilise a daily documented and site-specific process to determine Goals-of-Care for all admitted (suspected or confirmed) COVID-19 patients within 24-hours after hospital admission. This may be in the form of regular scheduled meeting face-to-face or via tele/videoconference. The Goals-of-Care process will remain the primary responsibility of the primary care or home team but may also require senior ICU clinician input for more complex patients.

Outside of any scheduled review process, Emergency Department or ward clinical teams may refer any appropriate patients for intensive care triage categorisation. Such patients will be discussed and/or reviewed by a senior ICU clinician.

In an ED or ward setting, the treating clinical team can independently make a decision to deem a patient not for referral for provision of ICU-level management. ICU clinicians will be available at all times to provide support and advice, including if necessary, to review and examine individual patients.

4) Achieving consensus

Where consensus exists, it is the responsibility of the referring (home) team, to clearly document the decision-making process and final decision in the patient's medical record. Where there is no consensus, the decision-making process should proceed with direct consultant-to-consultant discussion, preferably involving a joint clinical review of the patient's clinical condition that involves the treating home team specialist and at least two intensivists. In this setting both disciplines should clearly document their final decision-making process. The desired aim is always decision-making by consensus but where agreement cannot be achieved then a majority decision is

sufficient. Where a consensus decision is not achieved, and time permits, all specialists retain the right to escalate the decision-making process through a nominated hospital representative for ethical review. A clinical decision review process may be advantageous in reaching consensus in difficult cases. Decisions and the decision-making process must be documented in the patient's medical record.

5) Matching demand to availability

It is not possible to accurately predict demand for ICU-level management which may rise precipitously and unpredictably. Clinicians will always make best effort judgements to match current and anticipated demand to current and anticipated supply of ICU-level management. The clinical teams providing ICU-level management will maintain a log of referred patients, noting the characteristics of patients identified as suitable or not suitable for ICU-level management and of patients in whom ongoing provision of advanced life-support is considered inappropriate. This will serve to maintain consistency of application. Regular meetings (if necessary daily) will be held with ICU specialists at different hospitals to maintain consistency of decision-making across hospitals. These meetings could be incorporated into the meeting as described in 3) Process for decision making. Meetings will be minuted and serve to provide a record of how assessment factors are being applied at different times.

6) Communication with patients and families

It is the role of ICU specialists and specialists from referring teams to meet with patients, families and delegated decision makers to explain the decision-making process and the outcome of clinical decisions. Records of such discussions must be made in the patient's medical record if there is any malalignment between capacity to provide ICU-level management and patient or family preferences. The lack of ICU suitability does NOT mean no care will be provided to the patient. The hospital must provide support to patients and families following discussions about ICU suitability if needed. Any major disagreement must be made known to the hospital executive.

Reference

- 1) Australian and New Zealand Intensive Care Society (2020) ANZICS COVID-19 Guidelines). Melbourne: ANZICS

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26 June 2020	21 Dec 2020	Nil changes

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