<table>
<thead>
<tr>
<th>NAME OF DOCUMENT</th>
<th>ICU / HDU Adult Admission Criteria</th>
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<tbody>
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<td>SESLHDPD/177 PD 172</td>
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<td>EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR</td>
<td>Prof. Gordian Fulde Director of Critical Care Clinical Stream</td>
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<tr>
<td>AUTHOR</td>
<td>Working Party: ICU Executive Contact Person: Suzanne Schacht, SESLHD ICU Program Coordinator</td>
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<td>KEY TERMS</td>
<td>Admission Criteria ICU; HDU</td>
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<td>SUMMARY</td>
<td>This procedure outlines levels of adult patient care and expected process and clinical indicators required for admission to High Dependency or Intensive Care Services.</td>
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1. **POLICY STATEMENT**
   This policy should be used in conjunction with the NSW Ministry of Health Policy - PD2010_021 Critical Care Tertiary Referral Networks and Transfer of Care (Adults) and SESLHDPR/228 Critical Care Bed Management.

2. **AIMS**
   To provide clinical guidance to ward-based and critical care teams on the clinical criteria and clinical decision-making processes required when admission for adult patients is sought to the High Dependency Unit (HDU) or the Intensive Care Unit (ICU).

3. **TARGET AUDIENCE**
   Attending Medical Officer and medical members of the primary care team /referring ward team
   Intensive Care Unit (ICU) Consultants
   ICU Staff Specialists
   ICU Senior Registrars
   ICU Nursing Unit Manager / Registered Nurse Team leader
   Patient Flow Manager (Bed Manager)

4. **RESPONSIBILITIES**
   4.1 The consultant in charge of the adult ICU at the time that a referral is made is responsible for overall decision making.
   4.2 It is the responsibility of all medical teams to ensure that criteria and clinical outcomes are explored prior to a request for admission and to ensure that clinical data is documented as part of that referral process. Any infection control issues must be communicated (e.g. presence of MRO, requirement for isolation) to ICU/HDU staff.
   4.3 Major planned surgical cases booked into the ICU/HDU should follow the agreed process. However, emergency admissions may impede this process as ICU/HDU beds will be prioritised according to medical need. ICU and bed management staff will work together to reschedule any delayed major surgery as a matter of priority.

5. **DEFINITIONS**
   Operational Definition:
   An intensive care patient has a life-threatening or potentially life-threatening and reversible or potentially reversible multiple organ failure. Their management requires continuous monitoring, point of care diagnostics and complex supportive therapy.

   High dependency care is a level of care in a specifically designed and resourced environment which is less than intensive care, but more than Level 1 or ward care. Both units are staffed by specialised medical, nursing and allied healthcare staff. Further details of the clinical definitions are contained in section 7 of this policy.
6. GUIDANCE AND CLINICAL DECISION-MAKING

When adult patients are referred to an ICU/HDU area for medical management, treatment and care there are various factors to be considered to ensure these patients are placed in the correct environment to deliver the management plan required to reverse their critical condition and/or provide ICU therapies to achieve agreed treatment goals.

Senior clinicians use the levels of care definition to assign the care required for each individual patient and place them accordingly. More complex decision-making rests with the consultant in charge (or their deputy) of the ICU/HDU as to whether the care provided there will in fact benefit the patient. These complex decisions take into account:

- The patient’s past medical history and drug regimen. This includes consideration of the patient’s co-morbidities, their functional capacity and their overall quality of life.
- The patient’s current medical management plan and any other aspects of that which may be significant (for example a valid advance care directive or ‘NO CPR’ order).
- Reflection on the patient’s wishes and desires and due attention to any other related aspects such as advance care directives and relative/carer perceptions.
- Discussions with the referring team over the goals of care and expected clinical outcomes that may be facilitated by an admission to an ICU or HDU bed.
- Communication is critical to the success of an appropriate referral and acceptance to a critical care unit. Information, clinical data and therapeutic plans and goals for the patient should be accurate and contemporary so that they can more reliably assist the decision-making process. Admission / transfer decisions lie with the consultant in charge of the ICU / HDU. Any decisions to admit or otherwise are to be clearly documented in the patient records at the time the decision is made. The rationale for admission or otherwise is to be communicated with the referring medical team.
- When a patient requires Level 1 care but there are no Level 1 beds available at that facility, consideration has to be given to capacity and demand factors in terms of accommodating the patient in a Level 2 environment.
- A broader understanding of the role of critical care. ICU beds are required for the South Eastern Sydney Local Health District (SESLHD) as well as the State-wide critical care service as part of the capacity and demand plan. Therefore local bed availability always has to factor in the requirements of SESLHD and NSW.
- In broad terms, however, admission to the ICU/HDU for those patients deemed appropriate (including major planned surgery) should not be refused due to exit block. The facility Critical Care Bed Management policy and escalation plan should be evoked locally before considering other capacity options. Transfer of a critical care patient has additional risks for that patient.
- When an appropriate ICU admission is not possible due to capacity and demand factors within a facility, the local escalation process for locating a critical care bed needs to be followed:
  1. Initially by resolving any ICU/HDU exit block patients
2. Ascertain if a critical care bed is available within SESLHD by reviewing the Critical Care Resource Management System (CCRS) via http://ccrs.health.nsw.gov.au. The CCRS is a state-wide web based information system and provides an overview of available critical care beds. The CCRS is updated via automated data feeds from the Patient Administration System. The system relies on manual updates of any pending admissions/discharges and therefore is an indication of available beds. Login details can be accessed at Section 8 of this document.

3. Confirming if an ICU bed is available by phoning POWH, SGH or TSH and requesting to speak with the Intensive Care Consultant on-call.

4. If no critical care beds are available within SESLHD the NSW Aeromedical and Medical Retrieval Service should be contacted to locate a bed and arrange transfer. This service should be used to arrange transfer for any time urgent critically ill patients by calling 1800 650 004 NSW Ministry of Health Policy - PD2010_021 Critical Care Tertiary Referral Networks and Transfer of Care (Adults)

- If the request for ICU admission is inappropriate, the ICU senior clinician - if time and ICU workload permits - may be asked to assist the ward-based team with an interim clinical management plan for that patient.

7. POLICY and CLINICAL APPLICATION

7.1 Levels of care descriptors used when assigning bed placement for adult patients:

Level 1 (Step Up/Step Down Unit) – Patients at risk of deterioration or those recently relocated from Level 2/3 care whose needs can be met on an acute ward with additional advice and support from specialist teams.

Level 2 (HDU bed) – Patients requiring more detailed observation or intervention including support for a single failing organ system or postoperative care and those stepping down from Level 3 care or up from Level 1 / ward care.

Level 3 (ICU bed) – Patients requiring advanced respiratory support alone or basic respiratory support together with support of at least two organ systems. This level includes complex patients requiring support for multi-organ failure.

7.2 Clinical criteria used to assist with decision-making regarding adult admissions

Level 2 criteria examples:

- A need for more than 50% inspired oxygen
- Non-invasive ventilation i.e. CPAP or BiPAP
- Invasive pressure monitoring
- Haemodynamic instability due to hypovolaemia, haemorrhage, sepsis or other cause
- Central nervous system depression that threatens to compromise airway and protective reflexes
- Impaired renal, electrolyte or metabolic function
• Patients requiring extended postoperative care (i.e. major elective surgery, intraoperative complications).

**Level 3 criteria examples:**
• Respiratory failure from any cause that requires invasive ventilation support, increasing levels of non-invasive ventilation support or extracorporeal respiratory support
• Surgical high risk patients who, in the context of their medical history and comorbidity factors, are likely to require advanced respiratory and monitoring/support of organ systems
• Continuous intravenous medications and supplementary oxygen / airway monitoring to control seizures
• Vasoactive drugs used to support arterial pressure or cardiac output or intra-aortic balloon pump support
• Patients resuscitated following cardiac arrest where intensive care is considered clinically appropriate
• Acute renal replacement therapy with other advanced levels of organ support
• Patients who have sustained an irreversible brain injury and for whom death is imminent, who meet the clinical criteria for a potential organ donor and/or the family has made an enquiry regarding organ donation during end of life discussions.

8. CRITICAL CARE RESOURCE SYSTEM LOGIN DETAILS

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<thead>
<tr>
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<td>TSH</td>
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9. REFERENCES

External
• NSW Ministry of Health Policy - PD2014_030 Using Resuscitation Plans in End of Life Decisions
• NSW Ministry of Health Policy - PD2010_021 Critical Care Tertiary Referral Networks and Transfer of Care (Adults)
• NSW Ministry of Health Guideline - GL2005_056 Advanced Care Directives (NSW) - Using
• NSW Ministry of Health Policy - PD2012_019 Retrieval Handover (Adults)

Internal
• SESLHDPR/228 Critical Care Bed Management
### 10. REVISION and APPROVAL HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision No.</th>
<th>Author and Approval / Details / Activity</th>
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<tr>
<td>12/05/2008</td>
<td>0</td>
<td>Working Party – ICU Executive, SESIH. Approved by Executive Sponsor Elizabeth Koff, Director Clinical Operations and Area Executive Team 12 May 2008.</td>
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<tr>
<td>September 2008</td>
<td>1</td>
<td>Renumbered from a Clinical Stream Procedure to a SESIH Procedure and minor formatting to cover sheet and header. No changes made to content.</td>
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<tr>
<td>March 2012</td>
<td>2</td>
<td>Reformatted to LHD policy procedure template; Links updated; minor changes to content to policy.</td>
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<tr>
<td>June 2012</td>
<td>2</td>
<td>Changes approved by Director Critical Care and Emergency Medicine.</td>
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<tr>
<td>May 2017</td>
<td>3</td>
<td>Additional clarity concerning the process of locating an ICU bed (pages 2-3)</td>
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<td>Format reviewed by Executive Services and published.</td>
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