



Ministry of Health & Family Welfare
Government of India



GUIDELINES FOR INTENSIVE CARE UNIT ADMISSION AND DISCHARGE CRITERIA

2023

INTENSIVE CARE UNIT ADMISSION AND DISCHARGE CRITERIA

This document was compiled by the following Doctors with Expertise in Critical Care Medicine working in different levels of Hospital and Intensive Care Units (ICU) across the country.

Experts :

1. Dr. Sheila Nainan Myatra, Tata Memorial Hospital, Mumbai
2. Dr. RK Mani, Yashoda Superspeciality Hospital, Kaushambi, Ghaziabad
3. Dr. Anjan Trikha, AIIMS, New Delhi
4. Dr. Ashish Bhalla, PGIMER Chandigarh
5. Dr. Asim Kumar Kundu, IPGMER, Kolkata
6. Dr. Banani Poddar, SGPGI, Lucknow
7. Dr. Dhruva Chaudhary, PGIMS, Rohtak
8. Dr. Dina Shah, Fortis Hospital, Noida
9. Dr. E Lenin Babu, JIPMER Puducherry
10. Dr. HC Sachdeva, Safdarjung Hospital, New Delhi
11. Dr. Indu A Chadha, BJMC Ahmedabad, Gujarat
12. Dr. JV Peter, CMC Vellore
13. Dr. JV Divatia, Tata Memorial Hospital, Mumbai
14. Dr. Kanwalpreet Sodhi, Deep Hospital, Ludhiana, Punjab
15. Dr. Lokesh Kashyap, AIIMS, New Delhi
16. Dr. Niteen Karnik, LTMGH (Sion Hospital), Mumbai
17. Dr. Padmaja Durga, Nizam's Institute of Medical Sciences, Hyderabad
18. Dr. Pradip Bhattacharya, RIMS, Ranchi
19. Dr. Prashant Nasa, NMC Specialty Hospital, Dubai
20. Dr. Virendra K Arya, Max Rady College of Medicine, University of Manitoba, SBGH, Winnipeg, MB, Canada
21. Dr. Srinivas Samavedam, Ramdev Rao Hospital, Hyderabad
22. Dr. Subhash Todi, AMRI, Kolkata
23. Dr. Swagata Tripathy, AIIMS Bhubaneshwar
24. Dr. Krishan Kumar, CMO(SAG), Dte.GHS - Member Secretary

INTENSIVE CARE UNIT ADMISSION AND DISCHARGE CRITERIA

What is an Intensive Care Unit (ICU) and who is an Intensivist

Intensive Care Unit (ICU)¹

The terms Critical Care /Intensive Care/Intensive Therapy Unit are synonymous. It is a designated, specialized area for multidisciplinary, focused management of patients who have life-threatening, partially, or completely reversible organ(s) dysfunction. Such treatment requires continuous and intensive observation and interventions by a multi professional team of appropriately trained healthcare workers including doctors, nurses and other support staff with equipment and paraphernalia necessary for sustaining life until recovery.

Intensivist or Critical Care specialist^{2,3}

A specialist who has specific training, certification and experience in managing critically ill patients in an ICU.

The Intensivist should have a postgraduate qualification in Internal Medicine, Anaesthesia, Pulmonary Medicine, Emergency Medicine or General Surgery with either of the following:

- a) An additional qualification in Intensive Care such as DM Critical Care/Pulmonary Critical Care, DNB/FNB Critical Care (National Board of Examinations), Certificate Courses in Critical Care of the ISCCM (IDCCM and IFCCM), Post-Doctoral Fellowship inCritical Care (PDCC/Fellowship) from an NMC recognised University, or equivalent qualifications from abroad such as the American Board Certification, Australian or New Zealand Fellowship (FANZCA or FFICANZCA), UK (CCT dual recognition), or equivalent from Canada b) At least one-year training in a reputed ICU abroad.

A few candidates of the ISCCM Certificate Course (CTCCM) who have been certified with a 3-year training programme in Intensive Care after M.B.B.S. are also recognised as Intensivists. In addition, persons so qualified or trained must have at least two-years' experience in ICU (at least 50% time spent in the ICU).

In case of doctors not having either of the above mentioned qualifications or training, they should have extensive experience in Intensive Care in India after M.B.B.S., quantified as at least three years' experience in ICU (at least 50% time spent in the ICU).

EXPERT CONSENSUS STATEMENT

EXPERT CONSENSUS STATEMENTS

The Expert consensus statements have been made using the Delphi methodology to generate consensus. The Steering Group for Delphi process was SNM, RKM and PN who conducted the Delphi surveys using Google forms, prepared the Delphi statements and the reports. The Steering Group did not vote in Delphi surveys. The rest of the Experts voted anonymously over three rounds. Consensus was defined as achieved for an option when voted by 70% or more of the Experts. Stability was checked for all responses. The final statements were drafted from the MCQ responses that achieved consensus and stability.

- 1. Criteria for admitting a patient to ICU should be based on organ failure and need for organ support or in anticipation of deterioration in the medical condition.**
- 2. ICU Admission Criteria:**
 - Altered level of consciousness of recent onset
 - Hemodynamic instability (e.g., clinical features of shock, arrhythmias)
 - Need for respiratory support (e.g. escalating oxygen requirement, de-novo respiratory failure requiring non-invasive ventilation, invasive mechanical ventilation, etc.)
 - Patients with severe acute (or acute-on-chronic) illness requiring intensive monitoring and/or organ support
 - Any medical condition or disease with anticipation of deterioration
 - Patients who have experienced any major intraoperative complication (e.g. cardiovascular or respiratory instability)
 - Patients who have undergone major surgery, (e.g. thoracic, thoraco-abdominal, upper abdominal operations, trauma who require intensive monitoring or at a high risk of developing postoperative complications).
- 3. The following Critically Ill Patients should not be admitted to ICU:**
 - Patient's or next-of-kin informed refusal to be admitted in ICU
 - Any disease with a treatment limitation plan
 - Anyone with a living will or advanced directive against ICU care
 - Terminally ill patients with a medical judgement of futility
 - Low priority criteria in case of pandemic or disaster situation where there is resource-limitation (e.g. bed, workforce, equipment).
- 4. ICU Discharge Criteria**
 - Return of physiological aberrations to near normal or baseline status
 - Reasonable resolution and stability of the acute illness that necessitated ICU admission
 - Patient/family agrees for ICU discharge for a treatment-limiting decision or palliative care.
 - Based on lack of benefit from aggressive care (should be a medical decision, not obligating family agreement and as far as possible should not be based on economic constraints).

- For infection control reasons with ensuring appropriate care of the given patient in a non ICU location
- Rationing (i.e., prioritisation in the face of a resource crunch). In this event there should be an explicit and transparent written rationing policy that should be fair, consistent and reasonable.

5. The minimum patients monitoring required while awaiting an ICU bed include the following:

- Blood pressure (continuous/intermittent)
- Clinical monitoring (e.g., pulse rate, respiratory rate, breathing pattern, etc.)
- Heart rate (continuous/intermittent)
- Oxygen saturation - SpO₂ (continuous/intermittent)
- Capillary refill time
- Urine Output (continuous/intermittent)
- Neurological status e.g. Glasgow Coma Scale (GCS), Alert Verbal Pain Unresponsive (AVPU) scale etc.
- Intermittent temperature monitoring
- Blood sugar

6. Minimum stabilisation required before transferring a patient to ICU include the following:

- Ensuring a secure airway (i.e., tracheal intubation if the patient has a GCS ≤8)
- Ensuring adequate oxygenation and ventilation.
- Stable haemodynamics, either with or without vasoactive drug infusion.
- Ongoing correction of hyperglycemia/hypoglycemia and other life-threatening electrolyte/metabolic disturbances
- Initiation of definitive therapy for life-threatening condition (e.g., external fixation of a fractured limb, administration of antiepileptics for recurrent seizures, antiarrhythmic drug infusion for unstable arrhythmias etc, intravenous antibiotics for sepsis)

7. Minimum monitoring required for transferring a critically ill patient (inter-facility transfer to hospital/ICU):

- Blood pressure (continuous/intermittent)
- Clinical monitoring (pulse rate, respiratory rate, breathing pattern, etc.)
- Continuous Heart rate
- Continuous SpO₂
- Neurological status (AVPU, GCS, etc.)

References

- A. Rungta N, Zirpe KG, Dixit SB, Mehta Y, Chaudhry D, Govil D, Mishra RC, Sharma J, Amin P, Rao BK, Khilnani GC, Mittal K, Bhattacharya PK, Baronia AK, Javeri Y, Myatra SN, Rungta N, Tyagi R, Dhanuka S, Mishra M, Samavedam S. Indian Society of Critical Care Medicine Experts Committee Consensus Statement on ICU Planning and Designing, 2020. Indian J Crit Care Med. 2020 Jan;24(Suppl 1):S43-S60.
- B. Webiste : www.isccm.orgaccessed on 8th October 2023
- C. Divatia JV, Baronia AK, Bhagwati A, Chawla R, Iyer S, Jani CK, et al. Critical care delivery in intensive care units in India: Defining the functions, roles and responsibilities of a consultant intensivist. Indian J Crit Care Med. 2013;17(S1):15–25.
