

OVER ALL VIEW OF INTENSIVE CARE UNIT (ICU)

Received: January 1, 2021; **Accepted:** January 21, 2021; **Published:** January 27, 2021.

An intensive care unit (ICU), also known as an intensive therapy unit or intensive treatment unit (ITU) or critical care unit (CCU), is a special department of a hospital or health care facility that provides intensive care medicine. Common conditions that are treated within ICUs include acute respiratory distress syndrome, septic shock, and other life-threatening conditions.

In 1854, Florence Nightingale left for the Crimean War, where triage was used to separate seriously wounded soldiers from those with non-life-threatening conditions. Until recently it was reported that Nightingale reduced mortality from 40% to 2% on the battlefield. The first application of this idea in the United States was in 1955 by William Mosenthal, a surgeon at the Dartmouth-Hitchcock Medical Center.

Intensive care is needed if someone is seriously ill and requires intensive treatment and close monitoring, or if they're having surgery and intensive care can help them recover.

Some common reasons include:

- A serious accident – such as a road accident, a severe head injury, a serious fall or severe burns
- A serious short-term condition – such as a heart attack or stroke
- A serious infection – such as sepsis or severe pneumonia
- Major surgery – this can either be a planned part of your recovery, or an emergency measure if there are complications.

Jameson cooper

1 Department of intensive care unit, Australia.

Corresponding author: Jameson Cooper

✉ jamesoncooper@yahoo.com

MD., PhD, International Medicine and Critical Care, Australia.

Citation: William Avery Methods required for critical care nursing in Malawi. J Intensive & Crit Care 2021, 7:1.

Types

Hospitals may have ICUs that cater to a specific medical requirement or patient, such as those listed below:

- **Neonatal critical care unit:** This specialty unit cares for neonatal patients who have not left the hospital after birth. Common conditions cared for pre mature and complicated conditions and congenital disorders resulting from birthing process.
- **Pediatric intensive care:** Pediatric patients are treated in this intensive care unit for life threatening conditions such as asthma, influenza traumatic neurological injury. These units also typically cater for cardiac transplantation and postoperative cardiac catheterization patients if those services are offered at hospital.

- **Geriatric intensive-care unit:** Geriatric intensive care units began because the world population is aging. Geriatric medicine is distinct from adult or pediatric medicine, especially if they are critically ill. Geriatric medicine was not included in the curricula of undergraduate or advanced medical training until recently, so not all critical care physicians are oriented to the specific needs of geriatric patients.
- **Psychiatric intensive care unit:** Patients who may voluntarily harm themselves are brought here for more vigorous monitoring.
- **Coronary care unit:** Caters to patients specifically with congenital heart defects or life-threatening cardiac conditions such as a myocardial infarction or a cardiac arrest.
- **Post-anesthesia care unit:** Provides immediate post-op observation and stabilization of patients following surgical operations and anesthesia. Patients are usually held in such facilities for a limited amount of time and have to meet set physiological aspects before being transferred back to a ward with a qualified nurse escort.
- **Surgical intensive care unit:** A specialized service in larger hospitals that provides inpatient care for critically ill patients on surgical services. As opposed to other ICUs, the care is managed by surgeons or anesthesiologists trained in critical-care.

Equipment and Systems

Equipment that may be used on an ICU includes:

- Ventilator – a machine that helps with breathing; a tube is placed in the mouth, nose or through a small cut in the throat (tracheostomy)
- Monitoring equipment – used to measure important bodily functions, such as heart rate, blood pressure and the level of oxygen in the blood
- IV lines and pumps – tubes inserted into a vein (intravenously) to provide fluids, nutrition and medication
- Feeding tubes – tubes placed in the nose, through a small cut made in the tummy or into a vein if a person is unable to eat normally

Drains and catheters – drains are tubes used to remove any build-up of blood or fluid from the body; catheters are thin tubes inserted into the bladder to drain pee.

Quality of Care

International guidelines recommend that every patient gets checked for delirium every day (usually twice or as much required) using a validated clinical tool. The two most widely used are the Confusion Assessment Method for the ICU (CAM-ICU) and the Intensive Care Delirium Screening Checklist (ICDSC).

Recovering from intensive care

Once a person no longer needs intensive care, they can be transferred to a different ward to continue their recovery before eventually going home. Some people may leave the ICU after a few days. Others may need to stay in the ICU for months or may deteriorate there. Many people who leave an ICU will make a good recovery. But sometimes there can be lingering problems, such as:

- weakness and stiffness
- Extreme tiredness (fatigue) and a lack of energy
- Loss of appetite and weight loss
- Sleep problems
- Depression, anxiety or post-traumatic stress disorder (PTSD)
- Problems with mental abilities – for example, not being able to think clearly and being forgetful