Worcestershire Acute Hospitals NHS Trust

Critical Care Unit Admission Guidelines
Worcester Royal Hospital
Alexandra Hospital

Key Document code:	WAHT-KD-022
Key Document Owner:	Clinical Director ICM – Sian Bhardwaj
Approved by:	Intensive Care Forum
Date of Approval:	24th January 2024
Date of review: This is the most current document and should be used until a revised version is in place	24th January 2027

Key Amendments

Date	Amendment	Approved by
20th March 2020	Document extended for 6 months due to current COVID-19 Pandemic	Dr Burtenshaw
28th January 2021	Addition of information around communicating remotely using high fidelity communication device. Document approved for 3 years.	ICM Forum
16th January 2024	Updated to include new levels of adult critical care, new regional mutual aid / decompression process, capacity on a countywide basis.	

INTRODUCTION

Worcestershire Acute NHS Trust ('The Trust') is committed to providing critical care services within the trust for all patients who may require it, irrespective of bed availability within the designated intensive care units.

Where beds are not immediately available within the intensive care units, and admission is delayed, patients may suffer harm. Likewise, patients who are discharged from the intensive care unit out of normal working hours (usually to make a bed available for a new patient) may also suffer harm.

The purpose of this document is therefore to ensure that beds and outreach resources are used appropriately and efficiently. This can be achieved by making it clearly understood which patients are likely to derive significant benefit from critical care, and for which patients critical care provision is no longer required or indicated.

Where a bed is not immediately available on the intensive care unit, this policy outlines the steps to be taken to secure an appropriate level of medical care prior to transfer to an empty bed either within or outside the trust.

Most of the guidance in this document is in line with documents from Department of Health, NCEPOD, GMC and the Intensive Care Society (see supporting documentation).

Scope of the policy

Intensive care units at Worcestershire Royal Hospital and Alexandra Hospital.
High Dependency Units at Worcestershire Royal Hospital, Coronary Care and other areas that admit only level 2 patients with a limited range of conditions are currently excluded from this policy.

Definitions

The terms 'critical care' and 'intensive care' are used interchangeably within the document.

In 2021, the 'Levels of Adult Critical Care' classification was redefined to reflect the modern delivery of critical care:

Levels of care are defined as follows: (GPICS V2.1 July 2022)

Level	Example of needs
Ward based	• Patients whose needs can be met through normal ward care in an acute hospital • Patients who have recently been relocated from a higher level of care, but their needs can be met on an acute ward with additional advice and support from the critical care outreach team • Patients who can be managed on a ward but remain at risk of clinical deterioration
1 – Enhanced Care	• Patients requiring more detailed observations or interventions, including basic support for a single organ system and those 'stepping down' from higher levels of care. • Patients requiring interventions to prevent further deterioration or rehabilitation needs which cannot be met on a normal ward. • Patients who require ongoing interventions (other than routine follow-up) from critical care outreach teams to intervene in deterioration or to support escalation of care. • Patients needing a greater degree of observation and monitoring that cannot be safely provided on a ward, judged on the basis of clinical circumstances and ward resources
2 – Critical care	• Patients requiring increased levels of observations or interventions (beyond Level 1), including basic support for two or more organ systems and those 'stepping down' from higher levels of care. • Patients requiring interventions to prevent further deterioration or to support ongoing rehabilitation needs, beyond that of Level 1. • Patients needing two or more basic organ systems monitoring and support. • Patients needing one organ system monitored and supported at an advanced level (other than advanced respiratory support). • Patients needing long-term advanced respiratory support. • Patients who require Level 1 care for organ support but who require enhanced nursing for other reasons, in particular maintaining patient safety if severely agitated. • Patients needing extended post-operative care, outside that which can be provided in enhanced care units: extended postoperative observation is required either because of the nature of the procedure and/or the patient's condition and comorbidities.

	• Patients with major uncorrected physiological abnormalities, whose care needs cannot be met elsewhere. • Patients who require nursing and therapies input more frequently than available in Level 1 areas.
3 – Critical Care	• Patients who need advanced respiratory monitoring and support alone. • Patients who require monitoring and support for two or more organ systems at an advanced level. • Patients with chronic impairment of one or more organ systems sufficient to restrict daily activities (comorbidity), and who require support for an acute reversible failure of another organ system. • Patients who experience delirium and agitation in addition to requiring Level 2 care. • Complex patients requiring support for multiple organ failure; this may not necessarily include advanced respiratory support.

Duties and Responsibilities

Board of Directors
To ensure critical care services provision on both hospital sites
To be made aware and participate in exceptional decisions where patients may have to be moved out of the trust intensive care units to other units where these transfers may not be in the patient's best interests.

Medical Director
To be aware of the policy, clinical governance and risk issues surrounding admission of patients to the critical care units.

Divisional Director
To be aware of the admission policy.
To act as intermediary between Executive Board and Critical Care Services.

Lead Clinician
To be aware of the policy.
To collect data on admissions and discharges, delayed admissions, refused admissions and out of hospital transfers and produce annual report.

Consultant on duty covering the intensive care unit
To be aware of the admission policy.
To be continually aware of the bed availability state in the intensive care unit.
To make judgements regarding whether individual patients will benefit from intensive care services, including the necessity for transfer to a suitable location within or outside the trust if a critical care bed is not immediately available within the trust.
To make judgements regarding discharge of patients from the intensive care unit
To provide clinical supervision of junior medical staff.

Referring senior medical staff
To be aware of the admission policy.
To liaise with consultant medical staff and intensive care consultants regarding referrals and to help make judgements as to whether or not individual patients may benefit from critical care or other treatments.
To support junior medical staff on the wards in the event that critical care services are temporarily overwhelmed.

Junior Medical staff
To be aware of the policy.
To keep senior medical staff informed of the condition of critically ill patients within the hospital, and explicitly, to inform the intensive care consultant of all referrals, and the consultant responsible for the patient who has been referred to critical care services.

Senior nursing staff on the intensive care unit
To be aware of the policy.
To ensure adequate nursing cover of the intensive care units in line with service expectations.
To inform the critical care consultant of the bed availability with respect to nursing cover at the start of each shift.

Critical Care Outreach Staff
To be aware of the policy.
To contact the critical care consultant if a referral is thought necessary, or to delegate this through the critical care medical staff.
To support critically ill patients who are outside the intensive care unit.

Bed managers
To be aware of the policy.
To prioritise discharge of patients from the intensive care unit to facilitate admission of critically ill patients to avoid unnecessary transfers either within or outside the trust.

Equality statement
Worcestershire Acute Hospitals NHS Trust is committed to maintaining equality & diversity for the benefit of all users and patients as well as the whole organisation.

Guideline detail

General statement about patient selection for critical care support

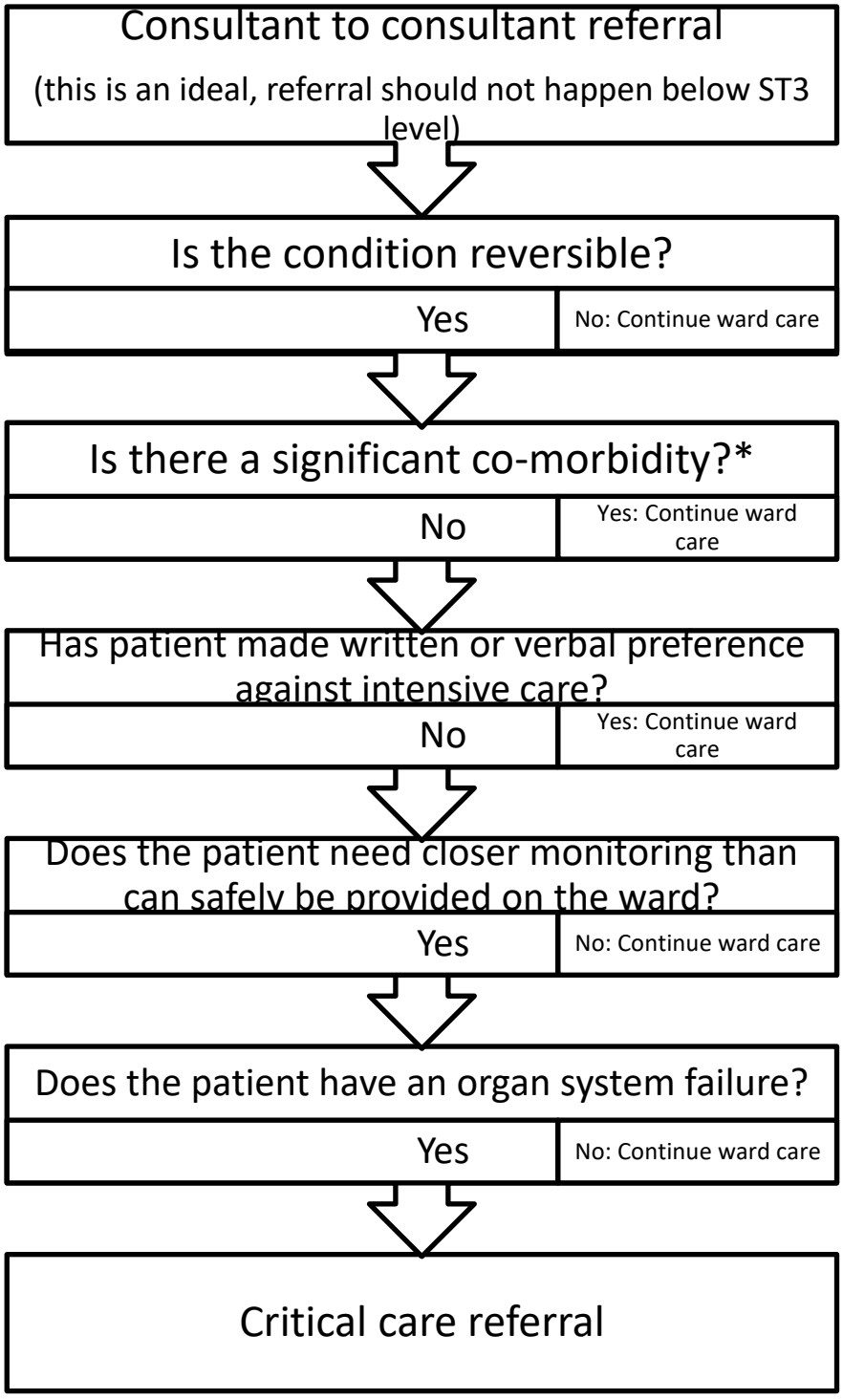
- The patient's condition should be acute and potentially reversible.
- Where there is a co-existing chronic condition, there must be a clear cause for an acute deterioration which is itself potentially reversible.
- Patients who are severely limited by chronic, progressive disease processes in terms of inability to function independently would not normally be considered for admission as this is a marker of poor prognosis.
- Patients often have long term serious health issues following discharge from critical care units. Patients with a low probability of long term survival, or a quality of life that would be acceptable to the patient (e.g. those with metastatic cancer or severe heart failure) would not normally be considered for admission.
- Wherever possible the views of the patient should be sought, documented and included in any decision process. Where this is not possible, best practice is to consult with the patient's advocates, which might include family and friends.
- Patients with mental capacity needing but refusing surgical intervention or other treatments including resuscitation would not normally be admitted to the critical care unit, and should be managed on the ward. Critical care is best understood as an adjunct to major curative therapies (surgery, antibitiotics, steroids, time etc.,) it is not a substitute for them.
- A consensus view should be sought between the referring team, the critical care team and the patient at all times.

Patient conditions that may benefit from critical care services (NB not necessarily Critical Care Unit admission)

Advanced Respiratory Support
• Mechanical ventilation – excluding long term home ventilation, non-invasive ventilation provided in trust designated area, Continuous Positive Airway Pressure
• The possibility of a *sudden, precipitous* decline in respiratory function requiring immediate endotracheal intubation and mechanical ventilation
Basic respiratory monitoring and support
• Inspired oxygen requirements greater than 50% via fixed performance face mask
• Likelihood of progressive decline in respiratory function to the point of needing advanced respiratory support
• The need for physiotherapy to clear secretions at least two-hourly
• The need for NIV or CPAP, where patients fall outside of guidelines covering these services on the wards/emergency department
• Patients who need intubation to protect the airway, but otherwise are stable (e.g. overdoses, extreme alcohol intoxication, head injury)
Circulatory support
• The need for cardioactive drugs to support blood pressure or cardiac output
• Support for hypovolaemia from any cause which is unresponsive to modest fluid therapy. This is not an alternative to surgery.
• Patients resuscitated following cardiac arrest
Neurological monitoring and support
• Central nervous system depression sufficient to prejudice their airway reflexes and/or other protective reflexes
• Invasive neurological monitoring
Renal support
• The need for *acute* renal replacement therapy

(after Department of Health Guidance 1996)

Procedure for referring a patient to Critical Care



(after DoH guidance 1996)

*A significant comorbidity is a chronic organ system failure sufficient to restrict daily activities, and have an independent negative effect on prognosis such that critical care treatment will no longer benefit the patient.

Emergency referrals

- When the need for Critical Care becomes apparent the medical staff/critical care outreach staff dealing with the patient will contact the appropriate Critical Care clinician to enable immediate stabilisation of the patient. This will usually be the on-call anaesthetic registrar/critical care registrar, critical care consultant, advanced critical care practitioner (ACCP) or critical care outreach nurses, depending on the referral pathway and staff availability.
- Wherever possible, the Critical Care Registrar or ACCP will leave the critical care unit to direct medical care at this point. If they are not immediately available, the on-call Critical Care Consultant should be made aware of the referral.
- At WRH there is a daytime (0800-1800) second on call intensive care consultant available to take referrals.
- If not already aware and in attendance, the patient's admitting team will be contacted, informed of the patient's deterioration and asked to attend.
- The referring medical team should contact the referring consultant, or if out of hours, the consultant responsible for the patient's care at that time so that they may offer:-
    - Support of their trainee doctors managing critically ill patients (this responsibility extends beyond directing medical management)
    - Timely, senior decision making about likely prognosis/ urgency of necessary therapies
    - Input into the referral and management of the critically ill patient under their care
    - NB The patient remains the responsibility of the referring medical/surgical consultant after admission to the ITU. If care is transferred between medical teams on discharge from ITU, it is the responsibility of the admitting medical team to arrange this (GMC, Royal College of Physicians).
- The views of the Consultant responsible for the patient's care on the ward should ordinarily be conveyed to the Critical Care Consultant. This may be directly, which should be usual practice during normal working hours, or via a junior doctor who has discussed the case with their consultant if they are off site and/or unable to personally review the patient.
- The Critical Care/Anaesthetic Registrar will also discuss the case with the Critical Care Consultant on call BEFORE admission to the Critical Care Unit.
- If critical care services are to be provided, the Critical Care staff will arrange admission and transfer to the unit (*see below*) or provide enhanced services on the ward until a bed is available.
- At all times clear communication must be maintained with the relatives and patient, but it must be made clear that only a critical care referral has been made until the patient is definitely accepted by the critical care team.

Elective referrals

- Patients should be booked in the elective diary for critical care only after consultation with the consultant responsible for the patient and the duty critical care consultant.
- It is the responsibility of the referring team to ensure a critical care bed is available on the day of the planned procedure/operation by checking with the senior nurse on the critical care unit before commencing the procedure.

Admission to the intensive care unit

- The Critical Care consultant will liaise with the senior nurse at the start of every day to ascertain bed availability and staffing levels.
- Prior to admission to the Critical Care Unit, the nurse in charge should be informed of the need for admission, and asked if the bed space is ready to receive the patient.
- Patients should not be admitted to the intensive care unit without the knowledge and consent of the nursing team.
- Discussion should include anticipated patient needs and include an assessment of the patient's required levels of care (*see above*).

- Patients transferred into the intensive care unit should be fully monitored to a level commensurate with the degree of their critical illness and accompanied by a suitably experienced member of medical or nursing staff.
- The time of decision to admit should be documented in ICCA (the critical care electronic patient record).
- The Critical Care Consultant should review the patient in person, or remotely using high fidelity communication device, within 12 hours of admission (GPICS).
- The relatives should be contacted within 2 hours of a patient's admission and informed, in general terms of the progress so far (NCEPOD, ICS).
- Stabilisation of the patient, and clinical safety overrides all other concerns.

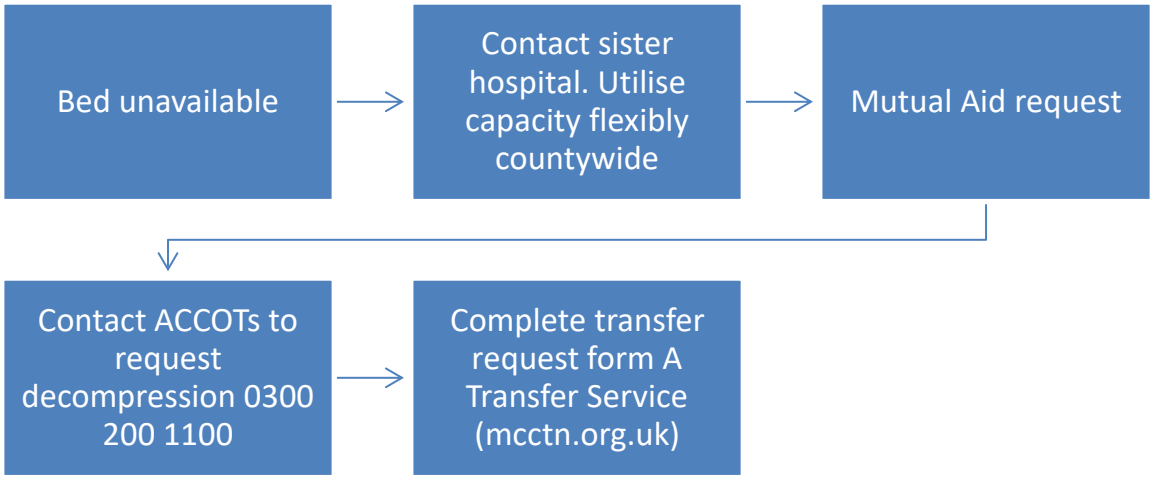
Procedure if critical care unit bed not immediately available

- Admission to the intensive care unit should occur within 4 hours of the decision to admit (GPICS).
- Treatment should be given according to the patient's needs, not the geographical location of the patient.
- Ensuring patient safety should be the first consideration, not just to the new referral, but to existing patients on the intensive care unit who should not be discharged as an expedient simply to make way for a new admission, except in the most exceptional circumstances e.g. Major Incident.
- Patients may be best served by either enhancing services on the ward they are currently on until a bed is available e.g. provision of NIV supervised by outreach nurse, movement to another location to facilitate invasive monitoring e.g. anaesthetic rooms, theatres, coronary care or the emergency department resuscitation rooms whilst awaiting a bed, or by transfer out of the hospital.
- The most appropriate location for on-going care whilst not on the intensive care unit and awaiting a bed, must be made by the critical care consultant.
- If a patient is cared for in a non-intensive care unit, medical and nursing staff availability and competence must match that for the patients on the intensive care unit. This usually will mean that an intensive care trained nurse and/or doctor remains with the patient continually until intensive care unit admission.
- Capacity should be considered on a countywide basis. If capacity is available within the county, consideration should be given to moving the ICU nurse to the patient.
- Consideration should be given to expediting the discharge of patients who have already been deemed ready for stepdown. In extreme circumstances, the use of theatre recovery can be considered to facilitate emergency capacity.

Transfer out of the hospital

- If there are no critical care beds within the trust, and none likely to become available in a timely fashion, the patient will need to be transferred out of the trust.
- Decision to transfer out of the hospital must be made by the responsible consultant for critical care, in consultation with the referring consultant to avoid transfer to hospitals where services that the patient requires are not available.
- Transfer outside the trust should be to a hospital within the Birmingham and Black Country Critical Care Network as first preference.
- Transfer for specialist services e.g. paediatric, burns care or neurosurgery falls outside this guideline.

Process for contacting neighbouring units until bed is found to accommodate patient



- Guidelines and clinical standards for the transfer of the critically ill are in accordance with GPICS V2.1 2022
- Transfers should take place in accordance with the *Midlands Critical Care Networks regional Transfer Policy – September 2018.*
- In extremely rare cases, it may be necessary to transfer a stable patient out of the critical care unit to make room for a new admission. This should be an option of last resort as it is not necessarily in the person best interests of the patient being transferred out. Such transfers should be treated as severe critical incidents and require the approval of senior management.

REFERENCES

1. Levels of Adult Critical Care Second Edition – Consensus Statement. ICS 2021
2. NCEPOD report 2005 'An acute problem'. NCEPOD, London 2005
   (Also available at ncepod.org.uk)
3. .Good Medical Practice. General Medical Council, London
4. Guidelines for the transfer of the critically ill adult. Intensive Care Society, London 2002
5. Midlands Critical Care Networks Regional Transfer Policy – September 2018
6. Guidelines for Provision of Intensive Care Services (GPICS) V2.1. Faculty of Intensive Care Medicine and Intensive Care Society 2022

MONITORING AND COMPLIANCE

This section should identify how the Trusts plan to monitor compliance with and the effectiveness of this Treatment pathway. It should include auditable standards and/or key performance indicators (KPIs) and details on the methods for monitoring compliance

What	How	Who	Where	When
These are the 'key' parts of the process that we are relying on to manage risk.	*What are we going to do to make sure the key parts of the process we have identified are being followed?*	*Who is responsible for the check?*	*Who will receive the monitoring results?*	*Set achievable frequencies.*
Two consultant decision to use $ECCO_2R$	Audit	Dr Bhardwaj	ICU Forum	Annually
All $ECCO_2R$ patients included in ELSO registry	Audit	Dr Bhardwaj	ICU Forum	Annually
Each patient should have complete sets of observations and a NEWS2 score calculated	Compliance with NEWS2 will be monitored by audit of Sunrise/ICCA	Ward Managers	Director of Nursing, Matrons	Weekly
Transfers from critical care should avoided between 22:00 and 07:00	Compliance with avoidance of out of hours transfers will be monitored via ICNARC data	ICNARC clerk	Consultant Clinical Lead ICU	Monthly
Patients transferred from critical areas should have a formal documented structured handover of care	Compliance with transfer documentation will be monitored by audit of patients notes	Outreach Team/FY1	Matron for ICU Clinical Director	Once Yearly
Critical Care Nutrition guidelines	Observation and chart reviews	Sr Julie Share, Nutrition Link Nurse Critical Care ALX, Sr Andrea Carn, Nutrition Link Nurse, WRH		Six monthly intervals
Management of patients with tracheostomy tubes	Audit	Critical Care outreach teams and physiotherapists at Alex and WRH		All tracheostomy patients

SUPPORTING DOCUMENT ONE – EQUALITY IMPACT ASSESSMENT TOOL		
To be completed by the Treatment pathway owner and submitted to the appropriate committee for consideration and approval.		
		Yes/No
1.	Does the treatment pathway affect one group less or more favourably than another on the basis of:	
	Race	**NO**
	Ethnic origins (including gypsies and travellers)	**NO**
	Nationality	**NO**
	Gender	**NO**
	Culture	**NO**
	Religion or belief	**NO**
	Sexual Orientation	**NO**
	Age	**NO**
2.	Is there any evidence that some groups are affected differently?	**NO**
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	**NO**
4.	Is the impact of the policy/guidance likely to be negative? If so can the impact be avoided?	**NO**
5.	What alternatives are there to achieving the policy/guidance without the impact?	**NO**
6.	Can we reduce the impact by taking different action?	**NO**
7.	Other comments	

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

SUPPORTING DOCUMENT TWO – FINANCIAL IMPACT ASSESSMENT		
To be completed by the Treatment pathway owner and submitted to the appropriate committee for consideration and approval.		
		Yes/No
1.	Does the implementation of this document require any additional Capital resources	**NO**
2.	Does the implementation of this document require additional revenue	**NO**
3.	Does the implementation of this document require additional manpower	**NO**
4.	Does the implementation of this document release any manpower costs through a change in practice	**NO**
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	**NO**
6.	Other comments	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval