#### NURSING CLINICAL STANDARD

# TRANSPORT OF CRITICALLY ILL PATIENTS BETWEEN ICU, PCU's AND SPECIAL PROCEDURE / DIAGNOSTIC TESTING AREAS

PURPOSE: To outline the management of critically ill patients during transport while maintaining a

comparable level of care.

SUPPORTIVE DATA:

Critically ill patients may be transported to special procedure/diagnostic areas to obtain additional care that is not available in the Intensive Care Unit (ICU) or Progressive Care Unit (PCU). The decision to transport a critically ill patient is based on assessment of the benefits of transport versus the potential risks.

Patients that require ICU/PCU level of care must be transported to and from special procedures/diagnostic testing areas must require cardio-respiratory monitoring. An RN or provider and another staff member (e.g., RCP, RN, NA) are required.

PCU patients whose condition has been downgraded and are awaiting a Medical Surgical bed transfer (with orders), may be transferred to special procedures/diagnostic testing areas via hospital transportation team without cardio-respiratory monitoring.

The Transport Team RN or the nurse caring for the patient should consult with the ordering provider prior to transporting the patient. Clarify issues regarding patient stability and confirming that the ordered test/procedure is valid.

In addition, the RN transporting the patient should consult the provider if in his/her clinical judgment a patient is too unstable for transport (e.g. HR < 60 per minute, systolic BP < 90 mmHg, or patient is receiving high doses of vasopressors).

Transport of a mechanically ventilated patient to MRI requires approval of the Critical Care Medical Officer of the Day. Patients receiving mechanical ventilation requiring FiO2 >0.6 and/or PEEP >10 cm H20 must have a trial simulating transport conditions before leaving the ICU/PCU

ASSESSMENT:

- 1. Assess readiness for transport by ensuring:
  - Correct patient and orders
  - Transport team receives patient report from primary nurse.
  - Vital signs meet criteria for transport
  - Consultation with RCP for patients' ability to tolerate transportation.
  - Consent (if applicable) is signed in the medical record
  - Relevant lab values are reviewed (e.g., Arterial Blood Gas, coagulation bloodwork)
  - Allergies are reviewed
  - Required equipment is available including:
    - Cardiac monitor with blood pressure cuff and pulse oximetry, and pressure monitoring as applicable
    - O Defibrillator for unstable patients, those at high risk of life-threatening arrhythmias and patients transported to the cardiac cath lab
  - Airway management equipment
    - Oral airway

- Obturator and extra tracheostomy tube for patients with tracheostomy
- o Bag-Valve-Mask (BVM) system including Oxygen tank readily available
- Patent Intravenous (IV), infusion pump(s) and ample supply of current IV fluids and medications
- Appropriate IV access for radiologic contrast studies
- Medication to meet anticipated needs (e.g., sedation) per provider's order with specified parameters
- Skeletal traction optimized by provider for transport

## MONITORING:

- 2. Ensure continuous monitoring of the following before, during, and after procedure/diagnostic test:
  - Heart rate & cardiac rhythm
  - Blood pressure
  - Respiratory rate & oxygen saturation
  - Pressure waveforms, if applicable

Note: Patients in MRI scanner will only have monitoring capability for heart rate, blood pressure, and oxygen saturation. Use appropriate IV tubing compatible for MRI.

3. Obtain POCT glucose test as ordered.

#### SAFETY:

- 4. Notify participants when transport will occur (if utilizing critical care transport team, notify via beeper/VOIP).
- 5. Confirm readiness of receiving area, that necessary equipment is available (e.g., wall suction, extra extension tubing, appropriate personal protective equipment for isolation).
- 6. Utilize the assistance of additional transport personnel as needed (e.g. provider, RCP, NA).
- 7. Ensure alarm parameters are set, individualized, and audible.
- 8. Ensure monitoring equipment is fully charged battery (including IV infusion pumps).
- 9. Ensure portable oxygen tank has sufficient oxygen for transport.
- 10. Ensure clamp is off to drainage during transport for external ventricular drain (EVD) (ventriculostomy).
- 11. Remain with patient until care is handed over to another trained ICU nurse or a provider.
- 12. Ensure hand off report is given in the diagnostic area to the appropriate team (critical care nurse or provider) responsible for monitoring and providing care to the patient.
- 13. Keep pulmonary artery, arterial and central venous lines attached to transducer/flush/pressure system during transport.
- 14. Ensure all drains are patent and secure.

# PATIENT/ CAREGIVER EDUCATION

- 15. Instruct on the following:
  - Explain purpose of transport to patient/family

# REPORTABLE CONDITIONS:

- 16. Changes in patient's vital signs anytime during transport, such as a significant increase or decrease in heart rate, blood pressure, respiratory rate, or oxygen saturation
- 17. A need to increase vasopressor dose(s)
- 18. Change in hemodynamic pressure waveform
- 19. Patient's inability to tolerate transport

### **DOCUMENATION**

- 20. Document vital signs before, during, and after transport/ procedure/ diagnostic test, a minimum of every 30 minutes and with any significant change in patient's condition (ensure pressure transducers are leveled before documenting these pressures)
  - Document to Quick View under the Transfer/Handoff section

Initial date	Reviewed and approved by:	Revision Date:
approved:	Professional Practice Committee	04/17, 10/19, 09/23
04/17	Nurse Executive Council	
	Attending Staff Association Executive Committee	

# References

American College of Critical Care Medicine, "Guidelines for the Inter- and Intrahospital Transport of Critically Ill Patients." 2004.

Agizew, T and (et. al) Evidence-Based Guideline on Critical Patient Transport and Handover to ICU.

Anesthesiology; Research and Practice. May 6, 2021

Evidence-Based Guideline on Critical Patient Transport and Handover to ICU - PMC (nih.gov)