West Yorkshire
Critical Care & Major Trauma
Operational Delivery Networks

Guideline for Turning Patients with a Protected Airway in Critical Care

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Owner	West Yorkshire Critical Care Operational Delivery Network
Acknowledgements	This guideline was written by Linda Brennand (Clinical Educator), Richard Cuthbert (Charge Nurse) and Liz Golding (Sister) from Adult Critical Care at Airedale NHS Foundation Trust (AGHFT). It has been peer reviewed, and assured by the Surgical Governance Group at ANHSFT in October 2022 for use within Adult Critical Care. It has been adapted by West Yorkshire Critical Care Operational Delivery Network with permission.

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Introduction

Patients nursed in Critical Care require positional changes for several reasons.

It is recognised that the obligation to implement guidance should not override any individual clinician to practice in a particular way if that variation can be fully justified in accordance with Bolam Principles[1]. Such variation in clinical practice might be both reasonable and justified at an individual patient level in line with best professional judgement. In this context, clinical guidelines do not have the force of law. It is expected that there is clear documentation of the reasons for such a decision and for this variation. In addition, any decision by an individual patient to refuse treatment in line with best practice must be respected, escalated to the consultant and fully documented in the appropriate records of care/treatment

Statement of Intent

This guideline has been developed by the critical care unit at Airedale NHS Foundation Trust and adapted by the West Yorkshire Critical Care Operational Delivery Network for use in all critical care units in the West Yorkshire Network. The aim of the guideline is to promote and maintain patient safety during the process of turning patients in Critical care.

The guideline is intended to be followed by nursing staff caring for critically ill patients on critical care, taking into account the following criteria:

1. All nursing staff will have had education in the principles of moving and handling.
2. All nursing staff will have been instructed in the safe movement of critical care patients.
3. All relevant protocols will be available on the Critical Care Unit.
4. All necessary equipment and medication will be available on the Critical Care Unit.

This guideline is not intended to be construed or to serve as a standard of medical care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. These parameters of practice should be considered guidelines only. Adherence to them will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. It is advised however that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.

[1] Bolam v Friern Hospital Management Committee (1957) 1 WLR 583

1. Management

The recommended process criteria are:

Turning patients in Critical Care is a potentially hazardous procedure but if planned and managed effectively can be performed safely. Prior to undertaking any turn, an assessment of the purpose of the turn should be made to avoid the patient being exposed to unnecessary risk.

2.1 Assessing the Risk

2.1.1 Before any patient is turned it is essential that the physical environment in which the turn is being undertaken is safe to work in. The assessment should include ensuring the floor is dry and free from trip hazards. All electrical cables, invasive lines, and gas supply pipes are secured safely.

2.1.2 Curtains/blinds should be drawn in order to maintain the dignity and privacy of the patient at all times during the turn.

2.1.3 The cardiovascular status of the patient should be assessed to ensure that they are stable before the turn is commenced. Patients' that have become cardio-vascularly unstable on previous turns should be reviewed pre turn and a plan of care agreed before the turn commenced.

2.1.4 The registered practitioner caring for the patient is responsible for assessing the purpose and timing of the turn. A consideration at this time should be made for combining several activities in to the planned move to prevent unnecessary risk or distress for patients who require moving frequently.

2.1.5 The assessing registered practitioner should consider several aspects of the turn at this time. The following must be considered.

- Timing of the turn - when is it to be performed and how long will it take.
- It is imperative that the process of turning should **NEVER** be rushed.
- Complete a Patient Handling Risk Assessment (see Appendix 1).
- The registered practitioner for the patient must make an assessment regarding the number of staff required to undertake turn safely. Consideration should be given to ;
    - A minimum of three competent staff to turn a patient with an artificial airway (one member of staff dedicated to the airway).
    - The weight and height of the patient. (If it is felt by the team that a patient presents a specific risk to themselves or the staff involved in the turn a risk assessment should be performed and specialist advice sought from the Manual Handling lead/champion.

- Physical injuries i.e. spinal injury, limb cast, traction, Steinman pins. (When turning patients with spinal injuries refer to local guidelines for turning such patients and seek advice from specialist teams)
- Medical Devices i.e. underwater seal drains, central venous catheters, arterial lines, faecal management devices, oesophageal doppler, cannula.
- Procedure to be performed i.e. lumbar puncture, change of sheets, physiotherapy.
- Sedation/analgesic requirements and degree of agitation.
- Manual handling devices required and their availability. This includes – slide sheets and hoists.
- The size of the staff undertaking the procedure.
- Any specific problems or issues identified with the patient that may cause problems with turning.

2.1.6 The grade of intubation must be identified at the bedside and also completed on the Patient Handling Risk Assessment

2.2 Planning the Turn

Once the turn has been assessed the appropriate number of competent staff should be assembled and any moving aids prepared. The registered practitioner caring for the patient should brief all staff undertaking the turn of the patients medical condition. This should include any potential risks or complications and what are being done to minimise the risks and finally a plan to deal with emergencies. **A senior registered practitioner will take the lead responsibility and allocate staff to specific tasks. This must include identifying a competent registered practitioner to be responsible for managing the artificial airway. If there are any concerns regarding the safety of the airway, this must be identified, discussed and care planned with a registered practitioner competent in advanced airway skills. Emergency and difficult intubation equipment must be readily available.** In addition, any high risk invasive lines or medical devices (arterial lines, central venous catheters, limb traction) are to be sufficiently secured and supported throughout the turning process. This includes ensuring that there is sufficient length of line or tubing to allow for the turn.

Consideration should be given to ensuring that the patient is pain free and appropriately sedated to safely tolerate being turned. Boluses of sedation and analgesia should be prescribed, checked and administered prior to undertaking the turn. It may also be necessary to pre-oxygenate patients who have high oxygen requirements or who previously on turning have desaturated. The need to pre-oxygenate should be reviewed on the daily MDT round and documented on the observation chart or in the patient notes. Pre Oxygenation should be administered via the ventilator using the 'pre oxygenation' facility. This is to ensure that patients are not inadvertently left on high concentrations of oxygen when the procedure is completed.

2.3 Undertaking the Turn

All staff involved in the role should follow universal infection control practice. Hand hygiene must be performed pre procedure and appropriate PPE should be worn throughout the procedure: as a minimum, disposable gloves and apron.

The registered practitioner with responsibility for managing the airway will ensure that all team members are aware of the plan and prepared for the procedure to commence. All actions will be preceded by the instruction '**Ready, Steady, Roll**'.

All members of staff involved in the turn should remain present until the procedure is complete and they are 'stood down' by the person supervising.

2.4 Undertaking a turn with Tracheostomy or Laryngectomy

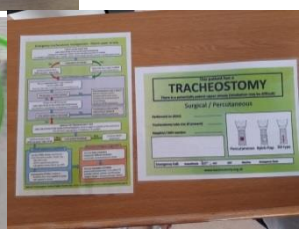
The most common artificial airways on the unit are provided via Endotracheal Tubes, but there can also be patients with tracheostomies (or laryngectomies) on critical care.

The following guidance is provided for moving a patient with a Tracheostomy or Laryngectomy.

N.B **Laryngectomy patents** have an end stoma and **cannot be oxygenated via the mouth or nose**

Tracheostomy/Laryngectomy competencies and understanding of this guideline must be completed before being involved in this manoeuvre.

Risks identified & Standard Operating Procedure		**Countermeasure**
1.	Cardiovascular instability	Ensure stability
2.	Respiratory instability	Pre-oxygenate
3.	Management of difficult airway in critical care guideline to be available	Make available
4.	High Risk Manoeuvre	Patient Handling Risk Assessment (Appendix 1)

	Bed side Algorithms Emergency Airway Trolley Emergency Tracheostomy / Laryngectomy Box Ambu Bag and Mapleson Circuit	   
No.	**Instruction**	**Photograph/ Diagram**
1.	Risk assessment to be carried out by registered practitioner caring for patient **(Appendix 1)**	
2.	Ensure bedside Algorithms, Emergency Airway Trolley and Tracheostomy/Laryngectomy equipment is available with a minimum of 3 staff.	
3.	Registered Practitioner overseeing the patient to provide overview of current status before any move.	Diagnosis, Inotropes, Risks.

4.	A competent senior registered practitioner to take the lead and allocate tasks to staff before taking responsibility for the airway. Consider involvement of a registered practitioner with advanced airway competencies.	
5.	Staff heights	Bring the patient to fingertip level of the rollers.
6.	Universal infection prevention control practices to be adhered to with gloves disposable apron and other PPE where required.	
7.	All staff members should follow the instruction of the lead practitioner responsible for the airway. Team must be aware of the plan and be prepared for the task in hand. All actions will be preceded by the instruction '**Ready Steady Roll'.**	

2.4 Evaluation

On completing the turn, the registered practitioner caring for the patient should record that the turn has taken place in the patient notes/charts including the reason for the turn and the position the position the patient has been placed in. At shift handover any issues or concerns should be handed over to the registered practitioner taking over care and this should also be documented in the patient notes. Any significant problems or concerns should be raised with the nurse in charge and brought to the attention of the unit medical team. This information should be reviewed in the daily MDT ward round and any specific plans documented in the medical and nursing notes and recorded on the observation chart.

It is imperative that all members of the MDT are made aware of any issues or concerns regarding the moving of a patient. This includes physiotherapists, occupational therapist, speech and language therapists, and porters.

2. Implementation and Audit

Responsibility for training and education will be led by the Clinical Educator for Critical Care and the moving and handling lead/champions. Responsibility also lies with individual practitioners to ensure that they have the appropriate skills and training. The senior nurses in critical care will monitor compliance at the bedside and promote good practice. Any concerns will be shared with the Lead Nurse/Matron for Critical Care.

3. Development

This guideline is based on currently accepted practice, best available evidence and will be reviewed in the light of new evidence or guidelines.

4. Consultation

This guideline has been peer reviewed, and assured by the Surgical Governance Group at ANHSFT in October 2022. WYCCODN adaptations have been agreed by the senior nurses of the network.

5. APPENDIX 1 - Patient Handling Risk Assessment

Patient information sticker	**WEIGHT**	**BMI**	**Mallampati Grade**
	Assessed by (within 12 hours of admission to ICU) **PRINT NAME & SIGN**		

HANDLING RISK FACTORS (PLEASE CIRCLE)

Patient :- Pain Physical weakness Underlying health conditions GCS Delirium

Confusion Communication problems Airway management Obesity Sedation Pre Oxygenation

Environment:- Space Lighting Temperature Fixtures/ Fittings Staffing

Initial Risk (Circle) – **High** (3) **Medium** (2) **Low** (1)

OTHER PERTINENT INFORMATION:

MANUAL HANDLING TASK	**SCORE**	**MH Risk Assessed & Identified Minimal No of staff required, Inc. skill mix**			**HANDLING TECHNIQUE REQUIRED & specialised Equipment**	**Initial**
	Please circle	**ANAESTH**	**RN's**	**HCSW**		
INVASIVE LINES *(Score 1 Per Line)*			2			
ENDOTRACHEAL TUBE	**2**		2	1		
CVVHDF	**2**		2	1		
OBESE PATIENTS BMI 45 or ABOVE	**3**	(1)	4/5	1		
DIFFICULT INTUBATION GRADE 3 or ABOVE	**4**	(1)	4/5	1		
TRACHEOSTOMY or LARYNGECTOMY	**4**	1	4			
SPINAL/NEURO/ SURGICAL/HEAD TRAUMA	**5**	1	4			
PARALYSED (BIS MONITORING)	**5**	1	4			
PRONED PATIENT / ARDS PROTOCOL	**6**	1	5			
OTHER:	**2** **3** **4**					
TOTAL SCORE GUIDE	Low 0-2	Medium 3-5		High 6+		Total

Additional Concerns & Information / Action required.		
Signature…….. **Designation**……..**Date**……..		
Review Date :	**Comments including changes** **Repeat assessment if significant changes occur and sign**	**Signed**

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Please note, this risk assessment should always be used in conjunction with Clinical judgement, Task, Individual, Load and Environment principles. Staff must adhere to safe practice and be trained in the type of handling to be carried out on patients in an critical care setting and be up to date with Moving and Handling Training.