

Competency 6: Setting up hot water humidification for patients with a tracheostomy tube



Trainee

Name:

Title:

Ward or department:

Clinical assessor

Name:

Title:

Method of assessment:

Supervision Record

Please detail your clinical supervision activity.

Date	Activity	Suggested learning activities	Clinical assessors signature

Skill criteria

- No errors observed 5
- Occasional errors, corrected by trainee 4
- Frequent errors, corrected by trainee 3
- Frequent errors, not corrected by trainee 2
- Trainee unable to proceed without instruction/prompting 1

K= knowledge (minimum level indicated in box *)

Knowledge criteria

- Evaluation: *articulates response, what, when how and why* 5
- Synthesis: *articulates the connections between the parts* 4
- Analysis: *able to examine how parts relate to the whole* 3
- Application: *can relate facts to another situation* 2
- Knowledge and understanding: *provides examples and distinguishes differences between examples* 1

S= skill (minimum level 4)

Observable criteria	Minimum level	Tick level of achievement					Assessment Outcome		Assessors Signature and Date
		1	2	3	4	5	Pass ✓	Fail ✓	
	* State required level i.e. S4, K5								
1. Describe the normal function of the upper respiratory tract	K5								
2. Describe how a tracheostomy can effect this function	K5								
3. Discuss two complications associated with administering medical gases without additional humidification	K5								
4. Identify the equipment needed by the bedside for a patient with a tracheostomy	K5								
5. Name four types of humidification systems used within the Trust	K5								

Observable criteria	Minimum level	Tick level of achievement					Assessment Outcome		Assessors Signature and Date
		1	2	3	4	5	Pass ✓	Fail ✓	
	* State required level i.e. S4, K5								
6. Set up the equipment required for hot water humidification	S5								
7. Identify four complications associated with this system	K5								
8. Discuss the <i>specific</i> infection control measures related to this procedure	K5								

Competency Statement

Practitioner's signature and date:

I am competent in this procedure at this time and understand the standard statement, action and outcome. Having received appropriate training, I accept full responsibility for the maintenance my own competence and have discussed this role as part of my job description with the person to whom I am managerially accountable.

Signature:

Date:

Printed name:

Date:

Clinical Assessor's signature and date:

I confirm that the above practitioner has achieved the required competency level and is now able to work autonomously in an unsupervised capacity.

Signature:

Date:

Printed name:

Date:

Job role:

Please place one copy of this record in your professional portfolio and give a second copy to your line manager

Assessors Guidelines

Assessment Criteria	Required knowledge and/or skill	
1. Describe the normal function of the upper respiratory tract	<ul style="list-style-type: none"> – Warms, filters and humidifies inspired air 	
2. Describe how a tracheostomy can effect this function	<ul style="list-style-type: none"> – By passes the above functions 	
3. Discuss three complications associated with administering medical gases without additional humidification	<ul style="list-style-type: none"> – Administration of dry gases will lead to damage and poor function of the ciliated epithelial cells in the trachea – Thickening of secretions leading to tube occlusion – Sputum retention 	
4. Identify the equipment needed by the bedside for a patient with a tracheostomy	<ul style="list-style-type: none"> – Suction unit (portable or wall) – Oxygen or air – Oxygen saturation monitor. – Area to wash hands – Disposable apron, gloves and mask with eye protection. 	<ul style="list-style-type: none"> – Single sterile gloves – Suction catheters – Jug or bowl – Water to flush suction tubing after procedure
5. Name four types of humidification systems used within the Trust	<ul style="list-style-type: none"> – Cold water (<i>Tyco Respiflow®</i>) – AERODYNE AEROSOL HEATER® – Swedish nose – Heat moisture exchange (HME) <i>Trachphone®</i> 	
6. Set up the equipment required for cold water humidification	<ul style="list-style-type: none"> – Explains the procedure to the patient – Identifies the correct medical gas – Attaches the nebuliser unit to the humidifier – Attaches the water bottle to the humidifier ensuring that the plastic bottle has been pierced – Inserts the temperature gauge – Attaches the circuit to the correct flow meter ensuring that it is not cross threaded 	

Assessment Criteria	Required knowledge and/or skill
	<ul style="list-style-type: none"> – Connects the elephant tubing ensuring that it is not more than 2 meters in length – Connects the tubing to the tracheostomy mask – Selects the correct oxygen concentration and flow rate – Selects the heater gauge – Checks that water is moving in the side arm – Check the system is working effectively. By ensuring that a stream of water vapour can be seen if the elephant tubing is disconnected at the adjustable oxygen device. – Attaches the mask, ensuring that the patient is comfortable – Documents the heater setting and temperature
7. Identify three complications associated with this system	<ul style="list-style-type: none"> – Increased risk of chest infection due to droplets of water accumulating in the tubing allowing bacteria to colonise. – Water aspiration if tubing is lifted above the level of the tracheostomy tube – Over humidification causing excessive moisture in the dependent bronchi, resulting in fluid overload and infection. – Overheating malfunction may cause a rise in core temperature – Overheating malfunction may cause tracheal and skin damage
8. Discuss the <i>specific</i> infection control measures	<ul style="list-style-type: none"> – Change elephant tubing every 24 hours and nebuliser attachment every five days – Change temperature gauge every?? – Dispose of elephant tubing in a yellow bag – Dispose of the nebuliser attachment in the sharps bin – Empty water condensation into a jug and dispose of in the sluice or toilet if in sideward