Acacium Group Community Assisted Ventilation

Policy Reference | CLIN 02

Version | V2.1

Policy Name	Assisted Ventilation
Purpose of Document	To identify clinical processes and best practice for the care of clients requiring support with respiration.
Target Audience	All Acacium Group workers in the community engaged in the delivery of care for service users requiring support with respiration.
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Author	Karen Matthews-Shard
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Risk And Resource Implications	Training Risk of inadequate care provision
Associated Strategies and SOPs	See page 18
Equality Impact Assessment (EIA) Form	Acacium Group is committed to Equality, Diversity and Inclusion and in line with our values, we strive to ensure that everyone that is part of the Acacium community is not disadvantaged or discriminated against given their individual need or characteristics. To support this, an Equality Impact Assessment has been undertaken on this policy/procedure. This information is held centrally and can be requested from the Clinical Governance Team.
About Acacium Group	Details of all Acacium Group trading companies that this policy applies to are detailed within Appendix A
Legislation	Legislation and Guidance pertinent to this policy can be found within Appendix B

Document History			
Version	**Date**	**Changes made/comments**	**By whom**
V1	Sep 2017	No previous document history.	MS
V1	Feb 2018	Updated front sheet to include new review frequency date. Changed reference list format.	KMS/MS
V1.1	Dec 2018	Updated in relation to training	KMS/SJ
V1.2	Jul 2019	3 yearly review	KMS/SJ/CAG
V1.3	Jan 2020	Updated to new Community Brand	CCR
V1.4	Oct 2020	Updated re rebrand	CCR/CC
V1.5	Dec 2021	Review	CAG
V2.0	Jan 2024	Rebrand	Clinical Advisory Group
V2.1	Nov 2024	Reviewed and updated	Clinical Advisory Group

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1. Introduction

1.1 Home ventilation is also known as assisted mechanical ventilation, which is provided in the client's home. Advances in assisted ventilation technology and an ethos of optimism for home care have increased the possibilities for discharging chronically ventilated service users from intensive care units, and acute medical beds.

1.2 The service user with long term respiratory insufficiency who is stable medically can expect a better quality of life outside the environment of the acute hospital setting, Acacium Group aim to provide the highest quality of care to support this.

1.3 This Policy applies to both adult and paediatric service users; the standard operating procedures (SOPs) differentiate paediatric care for assisted ventilation.

2. Purpose and Policy Statement

2.1 In order to improve service user care and reduce the risk of errors in practice, it is the remit of Acacium Group to provide a standard approach to the procedures of clinical interventions and practice.

2.2 This Policy outlines the types of assisted ventilation and is supported by the standard operating procedures (SOPs) for each type of assisted ventilation and associated procedures for cleaning, changing and emergency situations.

2.3 Ventilation results from pressure changes transmitted from the thoracic cavity to the lungs, in some service users this function is either diminished or absent and therefore the individual requires assistance with ventilation.

2.4 To ensure their safety, all service users will be regularly assessed for risk of infection and respiratory distress by a competent healthcare professional. Any need for help with respiratory problems will be identified, documented and appropriate action taken.

2.5 All service users will be cared for in their own home or place of residence and supported by trained competent staff. Full care plans for the service user will be implemented, reviewed and all associated care given will be documented accordingly.

3. Scope of Policy

3.1 This Policy aims to ensure that service users receive the optimum level of health care, in line with current professional guidelines, good practice, research-based evidence and knowledge.

3.2 This Policy applies to all relevant clinical staff involved in the process of assisted ventilation while employed by Acacium Group who may undertake procedures under the supervision of a registered member of staff (nurse etc).

3.3 All allied healthcare professionals/registered nurses/nursing associates/healthcare assistants/support workers must be deemed competent to carry out the procedure associated with assisted ventilation and have been trained accordingly in mechanical ventilation.

3.4 Both pharmacological and non-pharmacological (drug therapy and non- drug therapy) means can be used to assist in ventilation. This Policy and accompanying SOPs cover:

- definitions
- oxygen delivery
- tracheostomy
- humidification
- infection control
- consent
- ventilators
- suction
- safe use of ventilator circuits
- Bilevel Positive Airway Pressure (BIPAP)
- Continuous Positive Airway Pressure (CPAP)
- assisted cough
- phrenic nerve pacing

4. Key Principles

4.1 All professionals involved in providing service user care are expected to promote quality and safety at all times. This is to ensure compliance with their regulatory bodies and professional codes of conduct (where applicable).

4.2 All staff are expected to comply with all other policies that relate to this Policy. Please refer to those listed on page 17.

4.3 Comprehensive, consistent, and ongoing assessment is of paramount importance when caring for a service user receiving any level of assisted ventilation. The assessment should cover all aspects of a service user's wellbeing, i.e. emotional, mental etc. Physiological monitoring is not a substitute for assessment and observation of the service user and the support devices should be checked regularly. Features that should be assessed are:

- chest wall movement
- pallor
- respiratory effort
- general assessment – service user sweating / clammy / dyspnoeic
- service user comfort
- neurological status – signs of confusion / tiredness
- visual observations
- pathway of exhalation
- secretions
- alarms and safety parameters of the support devices, if in use.

4.4 The Assisted Ventilation Policy does not have the potential to discriminate on the basis of:

- gender
- age
- race
- disability
- religion or any other grounds.

4.5 Ethnic groups may have cultural sensitivities and hence staff need to be culturally aware. Wherever possible, cultural needs should always be met.

4.6 Any failure of this Policy or the procedures herein should be considered to be an incident. Any related incidents and near misses must be reported in line with the Acacium Group incident reporting procedures. Any serious untoward incident (SUI) should be reported immediately, where possible, by telephone to your Line Manager for escalation to the Group Clinical Director. Managers are responsible for ensuring that remedial action is taken and to feedback recommendations and learning to their staff.

4.7 Any problem with any of the ventilation equipment should be recorded in the client's care records and the product detailed in the client's s care plan. This must also be reported in line with the Acacium Group Incident Reporting Policy. The party responsible for the equipment must be informed and the manufacturer contacted. A replacement device should be sought immediately. The equipment owner should report the issue to the Medicines and Healthcare products Regulatory Agency (MHRA). Please refer to:

https://www.gov.uk/government/organisations/medicines-and-healthcare-products-regulatory-agency

4.8 The respiratory assessment, care plan documentation and ventilator prescription form part of Acacium Group policy.

4.9 The Assisted Ventilation Policy will be reviewed every three years, unless required more frequently by external or internal criteria.

4.10 All care delivered by Acacium Group staff will be in the community setting, care should be taken to respect the service user's home and wishes at all times.

5. Definitions

Topic	Explanation
Policy	A high level, overall statement of intent embracing general principles and the steps which the organisation expects the staff to follow. Policies are enforceable and failure to comply may result in disciplinary action.
Standard Operating Procedure	A formal set of steps to follow in order to achieve a specific outcome, which is specifically agreed for designated staff. Any deviation from the steps is acceptable if this can be justified and the rationale for doing so documented appropriately.
Guideline	A guideline is a principle. These are set down to help determine a course of action. They assist the particular individual to decide on a course of action but do not need to be automatically applied. A guideline does not replace professional judgement and discretion, but they SHOULD be followed.

Non-Invasive Positive Pressure Ventilation (NIPPV)	A ventilatory-assist technique used to support respiration without the need for endo/ orotracheal airway.
Ventilation	The process by which air is moved in and out of the lungs via the airways. The process is powered by the respiratory muscles and is responsive to both voluntary and involuntary nervous system control. In the care of the service user, ventilation is provided to support the normal breathing process.
BiPAP (Bilevel Positive Airway Pressure)	BiPAP is a form of non-invasive ventilation, that delivers two levels of air pressure instead of a continuous level of pressure.
CPAP (Continuous Positive Airway Pressure)	A ventilator support system which ensures that positive airway pressure is maintained greater than the ambient pressure throughout inspiration and expiration to keep the airway open.
Humidity	The amount of water vapour present in a gas.
Humidification	The process to compensate for the normal loss of water from the respiratory tract.
Tracheostomy	A tracheostomy is an artificial opening into the windpipe (trachea) that is held open by a tracheostomy tube, this can be temporary or permanent.
Suctioning	The use of suctioning is an integral part of client care. The aim of suctioning is to maintain a clear airway by preventing the accumulation of secretions. The frequency and method (oral, trachea and/ nasopharyngeal) of suction varies with individual client need.
Bag Valve Mask	A bag valve mask, abbreviated to BVM and sometimes known by the proprietary name Ambu bag or generically as a manual resuscitator or "self-inflating bag", is a hand-held device commonly used to provide positive pressure ventilation to patients who are not breathing or not breathing adequately.
High Flow Oxygen	High flow oxygen therapy is a form of respiratory support used where oxygen, often in conjunction with compressed air and humidification, is delivered to a patient at rates of flow higher than that delivered traditionally in oxygen therapy.
Grab Sheet	Documentation which includes all specific interventions required for the client
Ventilation Prescription	A document detailing the prescribed ventilator settings for the client. The prescription can be written by the Specialist/consultant in charge or Vent team

6. Infection Prevention and Control

6.1 A stoma site or respiratory tract infection can result from poor techniques when undertaking respiratory care from contaminated equipment, such as suction catheters, masks and from Tracheostomy toilet, changing of tube or when applying suction.

6.2 All staff should attend relevant training for infection prevention and control training as Acacium Group requires or provide evidence of training by certification as required by the Cores Skills Framework.

6.3 All staff should be aware of the Acacium Group Infection Prevention and Control Policy and any current pandemic guidelines .

6.4 SOPs must be followed to ensure compliance with infection control procedures i.e. whether a clean or aseptic technique process is required.

6.5 All equipment used should be checked for cleanliness and viability.

6.6 All soiled dressings and materials should be discarded appropriately to avoid cross contamination leading to infection.

6.7 All staff should ensure appropriate hand washing pre and post intervention to comply with the infection prevention policy.

6.8 All staff should adhere to Acacium Group Policies and Processes in relation to Personal Protection Equipment (PPE).

6.9 Any signs of infection should be reported and documented immediately to a senior member of staff, such as raised service user temperature, discharge, exudate, or cough.

7. Roles & Responsibilities

Job Title	Responsibilities
Line Manager/ Appropriate other	To make sure all workers are aware of, and comply with, this policy through induction, internal training and supervision.
Global Clinical Director/Group Chief Nurses	Responsible for ensuring that all policies, standard operating procedures (SOPs), protocols, training, and competencies, are in place to support workers or care in the safe delivery of safe and effective care provision.
Individual workers	Individual workers must: • Be aware of and comply with Acacium Group policies procedures and guidance • Escalate any signs & symptoms or any concerns not detailed within the clients specific care plan, as required and in line with the clients escalation plan • • Promote confidentiality, sharing information with partners on a need to know basis • Competency should be acquired through professional training, attending educational workshops, observation and supervised practice in the service user's home setting. Competence can be examined by questioning knowledge, observing practice and reflective practice journal. • All practitioners registered and non-registered should access regular supervision and support in line with local procedures

	• All staff should maintain accurate comprehensive and legible records, with records being stored securely in line with local guidance • Staff have a responsibility to promote the privacy and dignity of clients at all times. • Written information in regard to general ventilation care, products, what to do in an emergency, contact numbers for assistance should be provided for the carer by clinical staff.
Clinical Advisory Group (CAG)	Review polices and clinical documents for the Group in order to safeguard and improve quality in line with the Groups vision, strategic aims and in a context in which diversity is recognised and widely celebrated
The Senior Management Team	Are responsible for ensuring that the operational processes support the implementation of the policy and procedures, as well as the associated training of staff.
Respiratory Team /Long Term Ventilation (LVT) Team	The Client's respiratory team/consultant/ specialist LVT nurse will provide a prescription of ventilation, stating the pressures for the ventilation and the times that ventilation is needed. This is subject to regular review and forms the basis of the respiratory ventilation care plan. Prescriptions must be saved to the clients file as evidence of the prescribed care
Client / carer / relatives	Must be given every opportunity to participate fully in the provision of care that is within their capability and or capacity. Staff may support them in helping them to understand care needs and how to provide them if they are trained and competent to do so. Staff should also acknowledge that carers / relatives are likely to know the needs of the service user more than the health professional.
Carers	They are responsible for administering care to each individual client's needs in line with policies and procedures following a detailed, personalised service user care plan.

8. Consent

8.1 Consent must be gained for all interventions and care provided by Acacium Group staff to the client. This includes for all care procedures, such as applying ventilation suction etc.

8.2 **Consent is:** A service user's agreement for a health professional to provide care. Service users may indicate consent non-verbally (for example by presenting their arm for their Acacium Group to be taken), orally, or in writing. For the consent to be valid, the service user must:

- have capacity to make the particular decision
- have received sufficient and relevant information about what it is you are requesting of them or going to do to them, and communicated it in an appropriate way
- hive consent voluntarily and freely, not feeling under duress.

8.3 **Consent is not:** Where an adult service user lacks the capacity (either temporarily or permanently) to give or withhold consent for themselves, **no-one else can give consent on their behalf** (the only

exception to this is service users who have appointed in advance a personal welfare Lasting Power of Attorney (LPA).

8.3.1 Treatment, however, may be given if it is in the service user's best interests, as long as it has not been refused in advance in a valid and applicable advance decision to refuse treatment.

8.3.2 All staff must familiarise themselves with the Consent Policy and Mental Capacity Act, giving due regard to these when providing any form of healthcare.

8.3.3 Process of obtaining consent, assessing capability, capacity to consent and the key principles - refer to the Consent Policy

Please now ensure that you fully understand the Consent Policy and Mental Capacity Act.

9. Allergies

9.1 Wherever possible, latex free products should be used. However, Latex is contained in many pieces of equipment and supporting consumables. It is the responsibility of the carer to establish that there are no allergies to latex and, if there is, that appropriate latex free equipment and consumables are used.

9.2 Prior to the procedure the client should be asked if they have a history of allergy, specifically latex allergy.

9.3 All client notes must carry allergy information.

9.4 If latex allergy is present a non-latex based catheter and latex free sterile gloves must be used.

9.5 All allergies must be documented on the client's care plan, medication chart and any associated documentation.

10. Assisting Ventilation

10.1 Oxygen therapy: please refer to the MEDS20 Oxygen Therapy standard operating procedure.

10.2 Continuous Positive Airway Pressure (CPAP) is used for service users:

- with acute respiratory failure
- as a supportive measure where intubation and mechanical ventilation are not considered appropriate
- for acute respiratory distress syndrome
- for the management of sleep apnoea
- in cases of pulmonary oedema.

10.2.1 The aim of CPAP is to improve gas exchange (oxygen and carbon dioxide) within the lungs and improve breathing. Please refer to SOP Vet 18 Continuous Positive Airway Pressure

10.2.2 **CPAP is able to do this by:**

- increasing the functional capacity of the residual gas left in the lung at the end of normal respiration
- improving the ventilation/perfusion ratio (volume inspired by the absorption of the oxygen)
- improving the compliance of the lung preventing stiffness. A reduction in lung volume below a certain level result in airway collapse. CPAP prevents the lung from collapsing.
- increasing lung volume for gaseous exchange to take place.

10.3 **Disadvantages of CPAP**

10.3.1 There is a possibility of a reduction in cardiac output. However, spontaneous ventilation reduces the incidence and severity of this complication.

10.4 **Bi-level Positive Airway Pressure (BIPAP)**

10.4.1 BIPAP improves CO2 elimination, by periodically reducing the level of continuous positive airway pressure (CPAP). It was initially designed to reduce peak airway pressure. The service user is allowed to breathe at any time during the breathing cycle. The large expiration during deflation to atmospheric pressure augments alveolar ventilation and assists CO2 excretion. It is a pressure-controlled mode of ventilation. Please refer to SOP Vent 15 Bi-Level Positive Airway Pressure

10.4.2 This is the type of ventilation used mainly in the home setting. This mode assists breathing during inspiration and expiration; spontaneous or mechanical (assisted or not) provides a continuous airflow at two different pressure levels:

- Inspiratory Positive Airway Pressure (IPAP) where the machine provides a higher pressure when the service user inhales
- Expiratory Positive Airway Pressure (EPAP) where the machine provides a lower pressure on exhalation

10.5 **Non-invasive ventilation**

10.5.1 This is the use of mechanical ventilatory support which is applied without an artificial airway (i.e. Tracheostomy). The service user must be conscious and co-operative for this type of ventilation to be effective.

10.5.2 It is used in the following types of conditions, including but not limited to the following:

- restrictive pulmonary disease e.g. muscular dystrophy
- in progressive neuromuscular disease e.g. motor neurone disease
- in obstructive pulmonary disease e.g. COPD and cystic fibrosis
- in nocturnal hypoventilation
- for acute episodes of chronic respiratory disease

10.5.3 Non-invasive ventilators generally fall into two categories:

- pressure pre-set
- volume pre-set

10.6 **Invasive ventilation**

10.6.1 In invasive ventilation, air is delivered via a tube that is inserted into the windpipe through the mouth or sometimes the nose.

10.6.2 Endotracheal intubation: the tube is inserted into the patient's airway (trachea) through the mouth or nose. This is not something that is conducted in the community setting and Acacium Group staff would not be expected to care for any client who is intubated.

10.6.3 Tracheostomy: the tube is inserted through a hole made into the airway. See section 10.14.

10.6.4 All staff should be trained and competent in all areas of tracheostomy care in order to provide ventilation via a tracheostomy. All SOPs relating to tracheotomy care should be referenced and adhered to.

10.7 **Mechanical ventilation**

10.7.1 This is a device used to replace or assist breathing in order for satisfactory gas exchange to take place. Ventilators are able to control the tidal volume, respiration rate, time of inspiration against the time of expiration, inspired flow rate and inspired oxygen saturation. They are divided into two main categories of negative pressure and positive pressure ventilators.

10.7.2 Positive pressure ventilators provide a satisfactory exchange of gases by inflating the lungs with positive pressure via a tracheostomy tube. The ventilator has four main functions:

- Inflate the lungs.
- Provide the cycle from inspiration to expiration.
- Allows expiration to occur.
- Provide the cycle of expiration to inspiration.

10.7.3 The ventilator has a driving mechanism and can cycle from one phase of respiration to another by a pre-set pressure, time, or volume.

10.7.4 Varying modes of ventilation may be used:

- Intermittent Mandatory Ventilation (IMV)
- Pressure Support (PS)
- Pressure Control (PC)
- Volume Control
- Simulated Intermittent Mandatory Ventilation (SMIV)
- Pressure Regulated Volume Control (PRVC)
- Pressure Assisted Volume Control (PAVC)
- Continuous Positive Airway pressure (CPAP).

10.8 **Differences between adults and children:**

10.8.1 Ventilating adults and children are very different due to their lung and bone structure. Predominantly adults are ventilated using volume as the primary mode. This means that a certain volume is set, and the ventilator uses any pressure required to deliver the volume. Children would be susceptible to pneumothorax with volume ventilation and therefore use pressure ventilation where pressure used can be limited to prevent barotrauma to their lungs.

10.8.2 All Acacium Group staff using ventilators will receive training in the principles of use and the specifics of the make and model, followed by the assessment of competence in their use and management of the client.

10.9 **Ventilator Settings**

10.9.1 Each client will have a bespoke ventilation prescription which details the ventilation pressures that are needed for optimum respiratory function.

10.9.2 This prescription is used to prepare the care plan which care staff will follow.

10.9.3 The ventilator pressure settings should be checked against the care plan at the start of each care period. The member of staff should sign to say the ventilator settings are as per the care plan. Any discrepancy on the settings from the care plan should be reported to the clinician responsible for the client.

10.9.4 All ventilators should be locked to avoid accidental alteration of ventilation settings. Details of who can change the locked ventilation settings, should be detailed within the ventilator prescription and within the clients care plan

10.9.5 Clients will have a periodic Respiratory review carried out by the consultant or Long Term Ventilation nurse determine if the settings need to be changed. The settings can be changed by them during the review and a new prescription created, that will be required to change the care plan.

10.9.6 The team providing care to the client will be informed of the ventilator setting changes via email and verbal communication until the documentation can be updated. Documentation should be updated as soon as possible and be consistent with the relative documentation for the client such as the Grab sheet

10.9.7 If there is a remote consultant review and there is a decision to change the ventilator settings, this can be completed by the staff working with the client or a family member that is deemed competent to do this. When the change has been made, the clinical lead for the client will be informed and a visual check will be conducted remotely and agreement that the settings are as per the new guidance. Documentation and care plan alterations will be made and a new prescription provided that details the changes for reference.

10.9.8 If there are changes made by another provider or parent, the Acacium Group Clinical Lead would ask for evidence of change of prescription. If they are unable to provide this, we would ask for consent from the client to contact the relevant department and ask for the new settings.

10.9.9 When there are variable pressure prescriptions these should be pre-set programmes on the ventilator. If there is the requirement to switch between pre-set programmes, Acacium Group will ensure that there are clear guidelines/ instructions and clinical indications detailed in the care plan for when each program should be used. Any change between programmes and pressures should be detailed in the care notes, with the rationale for the change.

10.10 **Humidification**

10.10.1 Humidity is the amount of water vapour present in a gas. When a gas is at its maximum capacity it is said to be fully saturated and the warmer the gas the more vapour it can hold. In normal health the nasal passages and upper airways are able to warm, moisten and filter the inspired gases.

10.10.2 When there is a drop in the humidity the mucous that collects in the airways become thickened and eventually immobile which leads to infection and blockage of the patent airway.

10.10.3 Inhalation of oxygen used for respiratory therapy in a dry gas can cause evaporation of water from the respiratory tract if humidification is not used thus leading to infection.

10.10.4 In patients with a tracheostomy, the normal process of humidification by the nasal passages and upper airways is by-passed.

10.11 **Methods of humidification**

10.11.1 The humidification device will fulfil the following requirements:

- the inspired gas will be delivered to the trachea at room temperature of 32-37 degrees Celsius with 100% humidification
- the set temperature should remain constant
- the device should have a safety and alarm system to guard against overheating, over hydration, and electric shocks.
- it is essential that wide bore tubing is used to allow the formation of water vapour.

10.12 **Devices for humidification**

10.12.1 **Heat and moisture exchanger**

(HME) which performs the function of the nose and pharynx in conditioning the inspired air.

10.12.2 **Cold-water bubble humidifier**

Is a device that delivers partially humidified oxygen at about 50%. Gas is forced across or bubbled through water at room temperature however this method is not advised as it is inefficient.

10.12.3 **Water bath humidifiers**

Inspired gas is forced over or through a heated reservoir of water. The water must meet a set temperature; the gas then cools as it moves down the circuit with a relative humidity of 100%.

10.13 **Tracheostomy**

10.13.1 A tracheostomy is the surgical creation of an opening into the trachea through the neck. Once formed, the tracheostomy opening is kept patent with a tube that is curved to accommodate the anatomy of the trachea. Refer to suite of tracheostomy SOP's for further information.

10.14 **Laryngectomy**

A laryngectomy is the removal of all or part of the larynx and is typically performed as treatment for laryngeal cancer.

10.15 **Types of tracheostomy**

10.15.1 **Temporary**

Usually performed as an elective procedure at the time of major surgery. This is not used in the community / home settings.

10.15.2 **Permanent**

Usually performed following a total laryngectomy, the service user will breathe through this stoma and there is no connection with between the nasal passages and the trachea.

10.15.3 **Emergency**

Performed as an emergency for an obstructed airway, such as trauma, poisoning etc. This is not used in the community / home setting.

10.15.4 **Percutaneous**

A sheath is inserted into the trachea following incision under local anaesthetic. This method allows a more rapid closure of the stoma and lesser scar once the tube is removed.

10.15.5 **Surgical**

This is often performed under general anaesthetic but can be performed under local anaesthetic. A horizontal incision is made halfway between the sternal notch and the cricoid cartilage, the trachea is then exposed. The tube should sit over the second and third or third and fourth tracheal cartilages.

10.15.6 **Mini tracheostomy**

This is used when deep tracheal suction is required and not for oxygen therapy or mechanical ventilation. The internal diameter is often only 4mm.

10.16 **Types of tube**

10.16.1 Tracheostomy tubes are available in different designs, some have both outer and inner tubes. The outer tube is used to maintain the patency of the airway, while the inner tube, which sits snugly inside the outer tube, can be removed for cleaning without disturbing the stoma site. Disposable inner tubes are available. These are single use; they are quicker to use and minimise cross infection.

10.16.2 Tubes can be cuffed or uncuffed. The cuff provides a seal between the tracheostomy and the tracheal wall enabling effective ventilation, and protection from aspiration. The size and type of tube will depend on the size of the trachea and the individuals service user's needs.

10.16.3 All staff should refer to the guidelines and the clients individual care plan for the type of tube inserted for each service user to ensure familiarity.

10.16.4 For cuffed tubes, the cuff pressure should be documented in the care plan and the pressure checked at least twice daily, then recorded.

10.17 **Phrenic nerve pacing**

10.17.1 Phrenic nerve pacing is conducted when an electrode(s) is surgically implanted around the phrenic nerve(s), which are stimulated by a radiofrequency receiver usually implanted in the chest wall.

10.17.2 The diaphragm is stimulated to contract by electrodes placed on the phrenic nerve in the neck or thorax and is an alternative treatment for patients who have intact and functional phrenic nerves (NICE 2017)

10.17.3 This is used for individuals who have spinal cord injuries if deemed suitable.

10.17.4 Please refer to VENT22 SOP Phrenic Nerve Pacing for more information.

11. Client Information

11.1 Information is available for clients and carers on the principles of assisted ventilation. Acacium Group will be able to signpost individuals to the resources that best suit their needs.

11.2 Care plans which include the interventions, what to do and when, are available and placed within the client's care records, which are kept within the home.

12. Equipment on Discharge from Hospital

12.1 All medical procurement and provision of device equipment, servicing or maintenance of the equipment supplied is the responsibility of the CCG. Service users that are ventilator dependent must be discharged with 2 ventilators so that one is available for back up if required.

12.2 When Acacium Group take over the care from another provider in the community setting, they will ensure there are two ventilators available for use in the home. If this is not the case, a risk assessment will be conducted to ensure safe care provision can be established.

12.3 Acacium Group staff are responsible for ensuring the equipment is suitable, safe, and clean prior to each use.

12.4 Equipment checks are recorded by the Acacium Group staff member within the care record held on the premises.

12.5 Acacium Group staff are responsible for reporting any faults with equipment to the CCG and through the Acacium Group incident reporting procedure.

12.6 Acacium Group staff are responsible for social cleaning of the equipment only. The CCG are responsible for decontamination of equipment, if required.

12.7 The CCG is responsible for the procurement and supply of all consumables.

13. Record Keeping

13.1 A comprehensive care plan for all clients that require assisted ventilation will be completed prior to the package commencing. The care plan will be reviewed on a regular basis and any changes documented within the care record. This is to ensure that safe and effective care is communicated across any care boundaries. The service level agreement should detail who is responsible for the care plan and at what intervals it will be reviewed.

13.2 Observations will be recorded as determined by the care plan and the ventilator settings will be checked against the prescription and care plan at each shift.

13.3 All equipment and consumable changes will be recorded with the date and time of the change.

13.4 A full risk assessment of the service user and the environment will be conducted prior to the commencement of the package, and at regular intervals. It should be recorded in the service level agreement who is responsible for this and the frequency of the reviews.

14. Training

14.1 All staff caring for clients will have received or will be given training in the principles, anatomy and care for assisted ventilation which will be linked to the competency outcomes for the intervention of care. The training will be proportionate and relevant to the roles and responsibilities of each staff member.

All staff will have provided evidence or voluntarily completed training in assisted ventilation as required by the UK Core Skills framework.

14.2 Competencies will be assessed by a competent, and appropriately qualified allied healthcare professional or nurses using observation and questioning.

14.3 It is the responsibility of the clinical staff undertaking the procedure to ensure their clinical knowledge is updated, by reading journals or attending update / voluntary refresher training sessions.

14.4 Any delegated duties from the registered clinical staff remain the responsibility of the registered clinician.

15. Audit / Monitoring

15.1 An audit on record keeping will be undertaken every month.

15.2 Monitoring of incidents and complaints will be reviewed at the Clinical Quality and Safety meetings on a monthly basis.

16. Associated Policies / SOPs

SOPs

SOP VENT 01 Tracheostomy Dressing Change (Adult & Child)
SOP VENT 02 Tracheostomy Care General Guidelines
SOP VENT 03 Humidification of a Service User with a Tracheostomy
SOP VENT 04 Tracheal Suctioning (Adult & Child)
SOP VENT 05 Tracheostomy Tube Care (Adult)
SOP VENT 06 Tracheostomy Tube Change (Adult)
SOP VENT 07 Tracheostomy Tube Change (Child)
SOP VENT 08 Administration of a Nebuliser through a Ventilator Circuit (Child)
SOP VENT 09 Assembling a Ventilator Circuit (Child)
SOP VENT 10 Cleaning & Maintenance of Ventilator Masks and Circuits (Adult & Child)
SOP VENT 11 Safe Management of a Child During Outings
SOP VENT 12 Safe Management of a Ventilated Child During Power Failure
SOP VENT 13 Safe Use of Battery Packs (Child)
SOP VENT 14 Assisted Cough
SOP VENT 15 BiPAP
SOP VENT 16 Oral and Nasal Suctioning
SOP VENT 17 Care of the Mechanically Ventilated Service User
SOP VENT 18 CPAP
SOP VENT 19 Mechanical Assisted Cough
SOP VENT 20 Changing Tracheostomy Tapes (Child)
SOP VENT 21 Changing Tracheostomy Ties (Child)
SOP VENT 22 Phrenic Nerve Pacing
SOP VENT 23 Laryngectomy Care General Guidelines
SOP VENT 24 Emergency Tracheostomy Tube Change (Adult)
SOP VENT 25 Emergency Tracheostomy Tube Change (Child)
SOP VENT 26 Nasopharyngeal Airway Management
SOP VENT 27 Nebuliser Therapy

17. References

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- https://www.nhs.uk/conditions/consent-to-treatment/
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Appendix A: About Acacium Group

Acacium Group consists of a number of trading companies, each providing services within core niche areas of the health and social care industries. Therefore, as this document is a Group Policy, the Policy herein applies to all trading companies detailed below:

pulse Part of Acacium Group	Thornbury Nursing Services Part of Acacium Group
Thornbury Community Services Part of Acacium Group	Scottish Nursing Guild Part of Acacium Group

Appendix B: Legislation

The Health & Safety at Work Act 1974 requires that all organisations with more than three staff have in place processes to promote the health and safety of their staff.

Latex is classed as a hazardous substance which is covered by the Health and Safety Executive's Control of Substances Hazardous to Health (COSHH) Regulations 2002. Under the regulations, organisations have a duty to assess the risk, eliminate, substitute, and limit and control exposure to latex, unless there is a need to use it.

There is a requirement to report diagnosed cases of Occupational dermatitis (schedule 3) to RIDDOR (The Reporting of Injuries, Diseases and Dangerous Occurrences) Regulations 1995.

Equality and diversity

Under the Race Relation (Amendment) Act 2000 Acacium Group has a statutory duty to 'set out arrangements to assess and consult on how their policies and functions impact on race equality', in effect to undertake Equality Impact Assessments (EIA) on all policies and SOPs. The Equality Act October 2010 demands a similar process of Equality Impact Assessment in relation to disability. An EAI must be completed by the author of this policy using the checklist provided in Appendix A. See also Acacium Group Equality and Diversity policy.