PPLLTV

Paediatric Pan London Long Term Ventilation

Parent & Carer Tracheostomy Competency Document

Name of CYP……..

Name of Parent/Carer……..

Version 1, 2021. To be reviewed 2023

This competency document (2021) was developed by Tracheostomy specialists and the Paediatric Pan London Long Term Ventilation Group (PPLLTV). The PPLLTV is a group of clinical nurse specialists and allied health professionals. The authors are experts in the care of paediatric tracheostomy, tracheostomy long-term ventilation and non-invasive ventilation and work within all the main London Specialist Paediatric Centers. The ethos of this approach is to enable the caregiver to deliver safe, high-quality care against one common standard. The competencies are freely available for use by all, but practitioners should always refer to their local guidance if planning to use them in their own services.

This document has been devised to enable the assessment of a caregiver's competence to care for a child and young person (CYP) requiring a tracheostomy. The caregiver must demonstrate that they can undertake each relevant section and can consistently replicate each aspect of care, over a period of time, in a variety of contexts. When the caregiver feels confident and competent, they will sign each relevant section. Each section will be assessed and signed, by a qualified professional (assessor), once competency has been achieved.

The competency rating scale, adapted from Benner's Stages of Clinical Competence, enables the assessor to grade the caregiver's level of competence. The caregiver must demonstrate a minimum level of 'Achieved' in order to be deemed competent to care for the CYP without supervision.

The "achieved" box can only be signed by a healthcare worker governed by a regulatory body e.g., NMC, HCPC or GMC. Healthcare Assistants (HCA's) can deliver training and sign the observed/discussed with support boxes but must be countersigned by a healthcare worker governed by a regulatory body.

Final sign off needs to be completed by a senior staff member with clinical experience and competency in line with local policy. They should have either been aware of all the training done previously or as a minimum verbally go thought the competency book and then complete final sign off.

Observed /Discussed: Insight would be gained during the theoretical training

Performed/Discussed with support: Caregiver able to demonstrate/discuss the outlined skill with assistance

Achieved: Caregiver is able to demonstrate/discuss the outlined skilled independently

Caregiver sign: Caregiver to sign competency when they feel confident with the outlined skill

This document has been endorsed by:

North Thames Paediatric Network
Connecting paediatric services

South Thames Paediatric Network

This document was created by the PPLLTV group with specialists from: Central LTV team, Evelina London Children's Hospital, Great Ormond Street Hospital, King's College Hospital, Royal Brompton and Harefield Hospitals, Royal London Hospital, St George's University Hospital and The Children's Trust, Tadworth.

With special thanks to Jo Cooke, ANP ENT/Tracheostomies, GOSH, Jemma Bridger, LTV CNS, Central LTV Team and Catherine Jones, Wellchild Complex Needs Nurse Specialist, King's College Hospital.

CONTENTS.

TRAINING SCHEDULE

This training schedule can be utilised to outline when the competencies within this booklet are going to be completed and by who. This can be completed by the caregiver and the trainer so that the caregiver is aware of when training is occurring. It can also be utilised by the trainer to identify when another session is required for the caregiver and particularly useful if many trainers are involved.

Date and Time	Session	Caregiver name and Trainer name	Initials of trainer

TRAINING SCHEDULE

This training schedule can be utilised to outline when the competencies within this booklet are going to be completed and by who. This can be completed by the caregiver and the trainer so that the caregiver is aware of when training is occurring. It can also be utilised by the trainer to identify when another session is required for the caregiver and particularly useful if many trainers are involved.

Date and Time	Session	Caregiver name and Trainer name	Initials of trainer

SIGNATURE BLOCK

Any staff member who supervises or documents within this workbook must complete an entry below with their name, title, signature, and initials. This allows for follow-up if required.

Name	Designation	Signature	Initials

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Health and safety awareness and environment checks					
Received the 'Living with a tracheostomy' booklet or alternative (Appendix One).	Date received:				
Understands the underlying reasons and conditions for the CYP having a tracheostomy. Demonstrates awareness of the types of tracheostomy tubes and understand what tube is in use for the CYP.	Be aware that the clinical need for a tracheostomy can vary and the reasons for tracheostomy would have already been explained to you. There are many reasons but some of the more common complaints/conditions can be due to: • An airway obstruction e.g.: due to either a narrowing (stenosis) or floppy (malacic) airway. • Limited/smaller upper airway due to a congenital condition or surgery. • To protect the lungs from aspirated secretions. • Support long-term ventilation. • Support a surgical intervention. Caregiver has an understanding of the patency of the CYP's upper and lower airway and that these may have implications and/or special considerations for overall management. Caregiver must be familiar with and have knowledge of: • Any specific care plans, procedures or additional emergency equipment or tubes (to be available as required). • Specific procedures (specialist training may be required). Can describe what type of tube the CYP has and why this has been used. In addition, understands and is aware of any special considerations, equipment i.e.: cuffs, emergency equipment, positioning.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Health and safety awareness and environment checks					
Understands the need for continuous supervision/monitoring by a tracheostomy trained and competent adult.	Understand that a CYP with a tracheostomy should always be supervised by a competent adult and/or monitored at all times. Different methods to achieve this will be discussed with you individually e.g.: care package, saturation monitoring, apnoea monitoring, bells. Please follow local policy. Discuss the advantages and disadvantages of each method.				
Ensure the contents of the emergency box are correct, intact and checked. Discuss the items in the emergency box and how each item would support a tracheostomy emergency.	Contents of box and how each item supports an emergency: • CYP's specific tube (same style/size as the tube currently in use). It is always best to replace a tube with a like for like tube. • Half a size smaller (Shiley (must be a PVC tube)). If the current tube won't go in i.e., the stoma may have closed slightly. A PVC tube is stiffer than the silicone and may be easier to pass. It also assists with the seldinger technique. • Suction catheter- same size as you suction with. This assists with the seldinger technique (railroading the smaller tube in). • Tracheostomy tapes- to secure the tube after re-insertion. • Lubricating gel- to assist with tube insertion as required. • Round ended scissors- to cut the securing tapes. • Any specific equipment to manage the CYP airway in an emergency such as LMA, pocket face mask, Bag Valve Mask (BVM), syringes (to deflate cuff).				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Health and safety awareness and environment checks					
Ensure the contents of the emergency box are correct, intact and checked. Discuss the items in the emergency box and how each item would support a tracheostomy emergency. Ensure emergency equipment is available, intact and checked every time you take over the care of the CYP.	**Items must be checked every time the caregiver takes over care of the CYP.** In addition to the above for home use: • Velcro tapes (cotton end if using the silicone tubes) to secure the tube (as a single person tape tie). • One-way Laerdal resuscitation valve (to deliver breaths). • Disconnection wedge (to disconnect a device from the tracheostomy tube). Most hospitals use the 'Trachi case' from Kapitex- as its easily recognised as the emergency box. If a different box is used at home, then all caregivers must be aware of what it is. Fully working suction unit and suction catheters (of appropriate size) should be readily available/carried with the CYP **at all times**. • Oxygen and ancillaries (as/if required). • Nebuliser machine and ancillaries (as/if required). • Resuscitation equipment e.g., BVM, pocket mask and/or one-way Laerdal resuscitation valve. (This will be discussed with you on an individual basis.)				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Health and safety awareness and environment checks					
Check and ensure the tube chart/bedhead is completed correctly and placed at the head of the bed/cot/visible place in home environment. Understand the 4 T's and caregiver is familiar with how to check and demonstrate they are completed appropriately.	Caregiver can check the emergency box against the contents sheet and can correctly complete tube chart/bed head with the CYP's information and knows where this should be placed in the home environment. Caregiver can correctly undertake the 4T's: T- Tracheostomy Tape Tension is correct and supports the tube. T- Tracheostomy Tube is patent- suction. T- Tracheostomy emergency box has the correct contents. T- Tracheostomy Tube chart/bedhead is complete. (Appendix Two). **This safety huddle must be completed every time care is handed over.**				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Health and safety awareness and environment checks					
Discuss how infections are spread and how to minimise this.	Discuss and understand how infection is spread and how to minimise this. • Bacteria or viruses can be passed by direct or indirect contact (e.g., touching hands, from contaminated equipment or droplets, sneezing, suctioning or coughing). • Body fluids such as blood and saliva can contain the infective organisms and transmission of these fluids can cause the spreading of the infection. • Understands the appropriate use of personal protective equipment (PPE) to protect you and the CYP. Caregiver can select appropriate PPE for the task. • Caregiver can don and doff appropriate PPE and dispose of it correctly. • Caregiver can safely disposal of clinical waste e.g.: suction catheters in the appropriate waste bag.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Health and safety awareness and environment checks					
Can demonstrate effective hand washing technique.	Following local guidelines. Handwashing technique to be assessed to ensure all steps below are achieved.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Suctioning via a tracheostomy					
Recognise the need for a CYP to be suctioned and can discuss the implications and complications of suctioning.	Caregiver can identify the indications for suctioning which may include: (not exhaustive): •Noisy breathing (bubbling/raspy sounds). •Visible secretions at the tube opening. •CYP is restless or irritable. •CYP's breathing is faster or slower or there is an increased effort to breathe. •Change in oxygen saturations and heart rate. •Skin colour different form normal (cyanosis, blue lips etc.). •No breathing/noise via tracheostomy -could indicate blockage. •Nasal flaring. •Chest not rising and falling with breathing. Caregiver can discuss the complications of suctioning which may include: (not exhaustive) • Compromise to CYP including oxygen desaturation, obstruction of airway, profound effect on heart rate e.g., vagal response or tachycardia. • Trauma distal to the tube tip (granulation). • Infection (introduced or spread)				
Demonstrate how to use walled suction.	Can state the suitable pressures for the CYP based on their age (this will be discussed with you). Demonstrate how to turn on, set the pressure and reset the pressure when incorrect. Demonstrate how to connect suction equipment, test the pressure and change suction tubing/collection bag. Understands how too little and too much pressure may cause complications e.g., blocked tracheostomy tubes. • Distal tracheal and lung damage. • Uncomfortable for the CYP. • Change in colour of CYP and saturations due to excessive removal of air/oxygen.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Suctioning via a tracheostomy					
Demonstrate how to use portable suction.	Follow manufacturing guidelines specific to the portable suction unit that is being utilised, as different units will display the suction pressures, battery charge, self test in different ways. Demonstrate how to: • Charge the unit. • Device test 1. test for occlusion in the suction system, 2. efficiency of the pump system (strength of suction), 3. testing maximum suction capacity and 4. testing for any air leaks in the system. Link to specific device. • Check/test the battery charge of the unit. • Check and change the pressure settings on the unit. • Know how to attach the suction disposables. • Know how to replace the disposables on the unit and when to replace. • Know how to clean the suction unit.				
Understands importance of choosing the correct size suction catheter and length to suction. Use the bedhead tube charts.	Can identify the size of suction catheter utilising the formula: ID of tracheostomy used x 2 e.g., 3.5 tracheostomy x 2 = 7.0 Fr catheter. • Can state the correct length needed to suction. • Understand the different colours and markings on a suction catheter, always check and confirm both the colour and numbering before use (as different manufacturers may be different). • Complete the bedside tube chart with the correct suction distances. Suctioning should be just below the end of the tube. • Understand the importance of suction length and can verbalise the complications of suctioning beyond the tube tip i.e., cause tissue damage and distress to CYP. Too short could prevent effective removal of secretions and could lead to a blocked tube.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Suctioning via a tracheostomy					
Explain suction procedure, demonstrate appropriate suction technique and identify effectiveness of suction. Can demonstrate correct technique for suctioning via a tracheostomy (4 C's -correct catheter size, correct technique, correct depth, correct pressures).	• Able to explain importance of hand hygiene/correct use of PPE. • Identifies when the CYP requires suctioning. • Can state what the correct catheter size is, what pressures to use and what the significance of not doing this correctly could mean for the CYP. • Can identify what monitoring and assessments must be in place during suctioning e.g., loss of colour in CYP, coughing, irritability, saturation monitoring. • Understands the actions to take if CYP deteriorates during a suctioning session e.g., administer oxygen, stop suctioning, place on ventilator, call for help. Caregiver can explain and demonstrate appropriate suction technique: • Identifies when CYP requires suction. • Set/check the correct pressures. • Hand hygiene and application of correct PPE. • Remove the correct suction catheter from the packaging do not touch the distal end and identify the correct length using the markings on the catheter. • Insert the suction catheter (without applying suction pressure) to the correct length into the tracheostomy tube (confirm length previously from the tube chart). • Place your thumb over the suction port to apply continuous suction whilst withdrawing the catheter straight out of the tube- no twirling the catheter. • Observe CYP during the procedure, address and report any issues or changes in normal parameters. • Assess- has suctioning been effective and assess need for further suction. • Settle the CYP- put on HME, attach to ventilator. • Dispose of used suction equipment and PPE in the appropriate clinical waste and wash hands/apply alcohol gel. Document/report.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Suctioning via a tracheostomy					
Demonstrate how to assess secretions, identify any changes and awareness of who to contact when concerned.	Can identify the CYP's normal secretion status with regards to how often they need to be suctioned, their colour and consistency. Can assess the CYP's secretions and identify any changes from the norm e.g. • Colour (yellow, green, blood stained). • Consistency e.g., thicker, stickier than normal. • Increased frequency of suctioning . • Change of odour. Knows who to contact if there are changes: •CCN/GP/Paediatrician. •Respiratory team. •ENT team.				
Demonstrate how to dispose of suction unit waste safely and how to clean suction equipment.	Can describe importance of cleaning and changing the chamber/disposal liner and adhering to manufacturing guidelines. Depending on the unit used: Demonstrate safe removal of the liner from the suction unit and cap the open ports. If the unit does not have a liner, demonstrate the safe disposal of contents from the container. Discuss the importance of not putting contents down sinks.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy Tubes					
Caregiver is aware of the different types of tracheostomy tubes and understands why the tube is used for the CYP.	Can describe what tube the CYP has, why this tube is in situ and how this benefits the management of the CYP. Understands the specifics of the tube in situ such as cleaning, frequency of changes and storing. Understand the correct items that should be in the emergency box and what extra equipment is required to manage the tube in situ such as syringes, manometer, 3-way taps, water ampoules. • Discuss the importance of using the wedge and demonstrate how to use the disconnection wedge when removing devices from tube. • Discuss MRI/surgical compatibility and discuss when they can and cannot be used and discuss alternatives. • Discuss how often to change the tube (elective and emergency). • Discuss whether it is a single use tube, or can tube be sterilised? (If so, how many times can it be re-used and how to sterilise). Discuss compatibility with universal 15mm equipment, do they need any adapters (i.e., the silver/flat non-terminated tubes). • Understands the importance of reporting any tube concerns and discuss what to look for in the CYP when existing tubes need to be upsized or changed from a NEO to a PED i.e.: accidental decannulation, growing.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy Tape Changes and stoma care					
Demonstrate the correct and safe positioning of the CYP whilst changing the tapes or tracheostomy tube.	• Discuss with the caregiver and the CYP in deciding the preferred and safest positioning to carry out a tube/tape change: **Note: CYP preference should never compromise safety.** • Demonstrate the correct positioning of the CYP e.g., lying down, neck extended, sitting up, swaddled, in a wheelchair.				
Watch the changing of tracheostomy tapes video/podcast or alternative. https://www.gosh.nhs.uk/wards-and-departments/departments/clinical-specialties/tracheostomy-information-children-parents-and-healthcare-professionals/training-videos/	Date watched:				
Can correctly assess the tracheostomy site and surrounding skin.	Can describe what the CYP's neck normally looks like and recognises immediately any changes. Can discuss signs of site/neck infection and what to look out for: • E.g., redness, rash and/or inflamed, broken skin areas, bleeding, discomfort with tracheostomy care, offensive smell. • Generalised signs of an infection in the CYP: temperature, lethargy, not normal self. *Caregiver to be given the stoma/skin assessment pathway (or alternative). See Appendix Three.* • Discuss who they should contact if concerned and when: •CCN/GP/Paediatrician. •Respiratory team. •ENT team.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy Tape Changes and stoma care					
Aware of what actions to take on skin breakdown, granulation tissue, how to manage and who to contact.	Granulomas are caused by irritation from the tracheostomy tube/equipment. They are small swellings often flesh coloured that can increase in size and be problematic. • Discuss the formation of granulomas both externally and internally. Be aware of the causes: rubbing of tube, irritation from the suction catheter and how to reduce the likelihood of them forming. • Able to recognise a granuloma. • Be aware of current treatments: Cautery/steroid cream/steroid drops. • Discuss who they should contact if concerned and when: •CCN/GP/Paediatrician. •Respiratory team. •ENT team.				
Demonstrate the correct and safe holding of the tube during a tape change.	Caregiver can demonstrate safe holding of the tube during the tape change and how it changes during cleaning/applying the dressing. Discuss the importance and can demonstrate supporting the CYP during tape change e.g. supporting the tube AND back of head or back- **2 points of contact depending on if the CYP is sitting up or lying down.** Can vary depending on different factors e.g. dominant hand, position of CYP. Follow local guidance.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed / Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy Tape Changes and stoma care					
Demonstrate the correct technique for carrying out a tape change including positioning, cleaning and securing. Watch the podcast, refer to local policies.	• Discuss rationale for daily changes and cares. Aim is to keep area as clean and dry as possible to prevent irritation and risk of infection. This could include using bibs/scarf to protect the tracheostomy from oral secretions. • Can prepare and involve the CYP for the tape change. This could involve distraction, use of music, tv and position. • Discuss and list equipment required for a tape change: new tapes/ties (cut to length), gauze, saline/water/biofilm solution (check local policy). Remember to check emergency box is next to you, especially the Obturator. Working suction, and additional equipment such as BVM, one way valve (as required). Follow clinical guidelines. • Discuss any potential problems that may occur when changing tapes e.g., tube may decannulate/dislodge and discuss immediate actions on. Caregiver understands the importance for the obturator to be at hand e.g., will need to be inserted into the silicone range of tubes to aid an easier insertion if there is an accidental decannulation. Emergency box open and readily available. Explain and demonstrate the procedure for cleaning the tracheostomy site and changing of the dressing and tapes. Follow local guidance, ensuring stoma site and neck is cleaned and dried thoroughly using 5-point cleaning method: above & below the stoma, both sides (under the flanges) and the back of the neck. Use the swipe and blot technique (not rubbing, flicking/rolling the gauze). Use creams and dressings as indicated. Tapes must be flat to the skin and cut to fit so that they sit next to the dressing- no skin should be visible. Initially tied with a bow, once tension is confirmed convert to knots- Refer to podcast. Check/confirm correct tension- one finger should comfortably fit between the neck and the tapes.				
Can safely wash/bath/shower a CYP with a tracheostomy.	Demonstrates safe washing of CYP ensuring tracheostomy is clear of the water (half fill bath). Discuss the use of heat moisture exchanger (HME) bib/normal bib for younger children to help with this. As well as any additional equipment may help e.g., supportive chair for bath/shower, head protector, shower bib.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed / Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy tube change					
Watch the podcast/video of a tracheostomy tube change.	Date when watched: https://www.gosh.nhs.uk/wards-and-departments/departments/clinical-specialties/tracheostomy-information-children-parents-and-healthcare-professionals/training-videos/				
Demonstrate the correct positioning of the CYP for a tube change and are able to prepare all the necessary equipment as well as the CYP. Understand the correct tube in use and discuss any specifics relating to it (such as duration of use, sterilisation method, storage, length).	• Discuss rationale for tube change e.g., planned/unplanned/emergency. Can distinguish between an unplanned vs an emergency tube change e.g., accidental decannulation or CYP/responsible adult has accidentally cut the tube. • Can prepare and involve the CYP for the tube change (may not be possible in an emergency). • Lists and prepares the equipment required for a tube change (including tape change equipment). Essential items are: ▪ New tracheostomy tube (same size), lubricating jelly (remember only place on shaft), wet and dry gauze for cleaning, scissors, new tapes and dressing. Emergency box readily available and checked. • Discuss any potential problems that may occur when changing tube e.g., unable to insert or bleeding and the actions to take. • Following local guidance, the change should be done as quickly and smoothly as possible, ensure you are happy and ready to proceed.				
Can identify how to clean, store and reuse tracheostomy (if applicable/appropriate).	Some tubes can be re-used and sterilised between uses, this will be discussed on an individual basis. Awareness of differences in practice between hospitals and home. Discuss how the tube is cleaned before sterilisation including removal of the swivel connector (importance of putting this back on the correct way and implications if you don't). *Refer to the sterilisation SOP (Appendix Four) and algorithm and the manufacturers guidance on cleaning whilst in hospital if applicable.*				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed / Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy tube change					
Give caregiver a copy of the Smiths Medical home cleaning guidance (Appendix Five).	Date when given:				
Demonstrate the correct technique of carrying out a tube change.	• Describe the frequency for changing the tracheostomy tube based on manufacturers as well as CYP's clinical need e.g., this can vary from 7-28 days. • Describe and demonstrate the process as per guideline. • Cleaning equipment and emergency equipment to hand. Understanding when the CYP should be nil by mouth prior to the change (elective). • Prepare and position the CYP (whichever position is preferred/safe). • Check stoma and tube position (rule out any potential complications before attempting to change i.e., tight stoma, granulation tissue). • Measure new tube length (new suctioning distance). • Lubricate tube- apply small amount to curve of the tube only. • Tracheostomy tube is inserted in a curved motion, not to be forced and obturator to be removed immediately. Assess breathing and colour of CYP. Attach the HME/ventilator. Clean and secure tube as described previously.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed / Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Humidification via a tracheostomy					
Can describe the reasons for using artificial humidification and its importance.	Can identify the need and importance of artificial humidification • The upper airway performs an important role in warming and humidifying inspired air. • Having a tracheostomy bypasses these normal warming and humidifying mechanisms. • The CYP may require oxygen which is a dry gas and will dry up secretions. • Be observant during illness, clinical procedures, etc. Secretions may become thicker and more copious. Can verbalise the potential consequences of inadequate humidification: • Increased risk of tracheostomy blockage due to thick secretions. • Risk of infection, damage and lung collapse. • Increasing viscosity (thickness) of secretions. It is also important for the CYP to be hydrated with fluids whether this is orally, nasogastric tube fed, gastrostomy or jejunostomy fed.				
Identify the different humidification devices.	Awareness of different methods to deliver humidification:- • Heat Moisture Exchanges (HME), also known as Swedish nose. • - Humid-vent HME – for <10kg - Portex HME – for 10kg > (barrel) - Trachphone HME that can deliver 2L of oxygen - Freevent XtraCare HME (This will be discussed with you on an individual basis based on the CYPs' requirements). • Nebulisation via tracheostomy mask, T-piece, nebuliser pot or aerogen nebuliser • Buchanan bib as an alternative to an HME.				
Can identify CYP has the correct heat moisture exchanger on.	Can describe: • Which HME device the CYP uses. • Frequency of change – change HME at least daily, when contaminated or full of secretions. • How to administer oxygen via the tracheostomy (if applicable) – no more than 2 litres of oxygen via HME.				

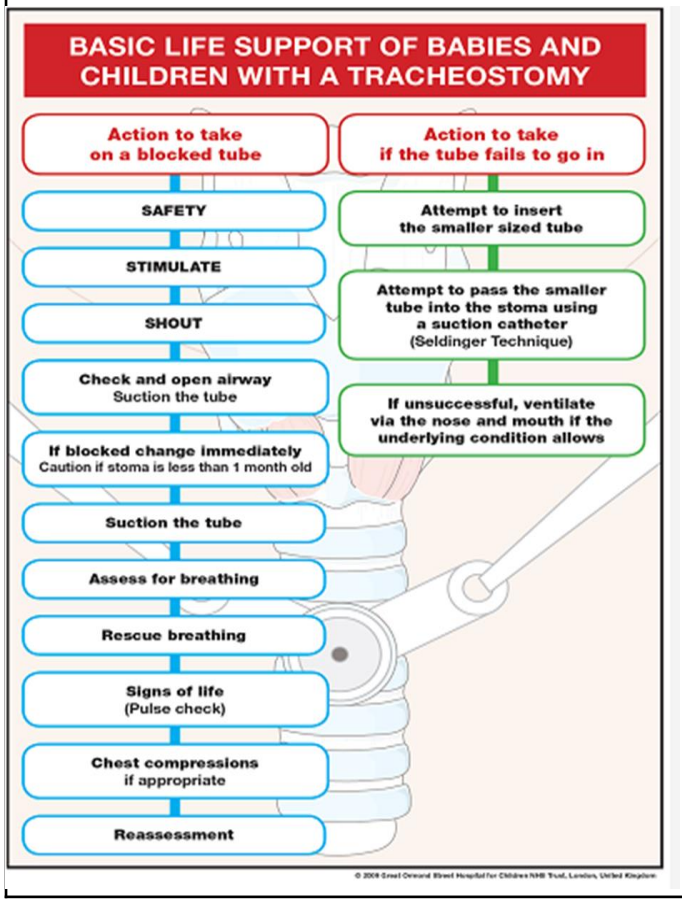
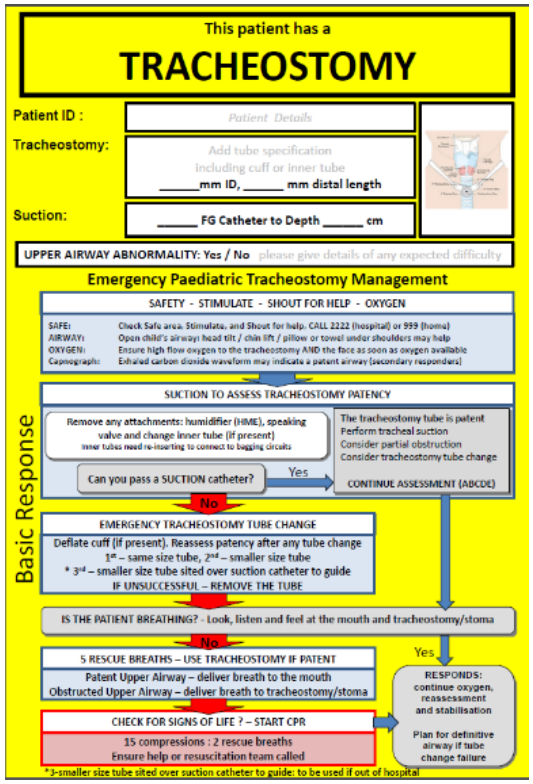
Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Humidification via a tracheostomy					
Appropriately select and assemble a nebuliser set up for a CYP with a tracheostomy.	Can identify how a nebuliser works and when a CYP may benefit from one. Can identify (if applicable) what different nebulisers (strength of saline) the CYP is on and when to use them. Can appropriately set up and administer a nebuliser via a jet stream device.				
Can demonstrate how to clean and store nebuliser equipment after use.	Demonstrate how to separate the nebuliser system. Demonstrate how to clean the system as per local guidelines. Demonstrate how the system should be left to dry and any storage instructions. Discuss when the system should be changed/replaced as per local guidelines.				
Can identify need and safe delivery of nebulised antibiotics.	Awareness of why/when to administer the nebulised antibiotics. Demonstrate the set up of the nebuliser system to administer antibiotics. Awareness of the complications of delivering antibiotics and how to manage/mitigate this- this will be discussed with you. Discuss any safety implications when administering nebulised antibiotics (i.e. ventilation, filtering).				
Can identify the CYP's normal nebuliser regime as per care plan.	Can describe what type of nebuliser and the timings of nebulisers given for CYP. Can describe differences between nebuliser types and saline strengths (if applicable) and when these are to be used.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Care Giver Sign and date when confident with skill
Humidification via a tracheostomy					
Can identify the need for extra nebulisers.	Can identify what symptoms the CYP maybe exhibiting that would benefit from extra nebulisers e.g. • Changes in the thickness of secretions. • Difficulty in removing secretions from the tracheostomy tube when suctioning.				
Observes CYP during a nebuliser and can identify any changes.	Changes that can occur when a nebuliser is given are (list not exhaustive): • CYP may cough and need more frequent suctioning. • If the cough becomes continuous this should be closely monitored as maybe a sign the CYP is not tolerating the nebuliser. • CYP oxygen saturations may change outside their normal limits, and this should be monitored • CYP may become wheezy/desaturate and may require a salbutamol nebuliser/inhaler/review by parent/clinician. • Know who to report concerns to.				
Observes CYP and monitors the effectiveness post nebuliser.	Caregiver can discuss if the nebuliser has been effective e.g. given to help loosen the secretions, supports an underlining respiratory condition.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Action plan for clinical deterioration					
Discuss normal parameters e.g., heart rate, breathing rate and effort, oxygen saturation and temperature.	It is important to understand and recognise the normal and to therefore recognise the abnormal quickly. An assessment of the CYP must be taken when care has been taken over: The assessment should be structured and must include: •**Airway: A** Checking that the tracheostomy is patent- are there any secretions, can they be easily removed, and tube is clear. •**Breathing: B** Observation of breathing (to include chest movement, respiratory rate, effort and oxygen saturations). Example: chest is moving same on both sides, breathing looks comfortable and CYP not in any discomfort, no obvious sucking in of chest or stomach, oxygen saturations normal range for them and breathing rate can be counted for one minute and within the CYP normal limits (if taught to do so). •**Circulation: C** Observation of circulation (to include colour, temperature, heart rate/strength and blood pressure if taught to do so). • **Disability: D** Observation of the CYP's responsiveness/neurology compared to their normal and age/development appropriate. Example: CYP is communicating in normal way, responding appropriately to interaction with surroundings e.g., CYP is smiling, nodding when being talked to, playing, babbling, talking and interacting and responding to activities, people in the room appropriately. Other co-morbidities/behaviours will be considered and discussed with you at the time of training as these may impact on the initial management and treatment.				
Able to recognise signs of distress or changes in clinical status and recognise what appropriate course of action should be taken	Able to recognise that the observations of the CYP are outside the normal levels . • Aware of what action to take next. • Know who to escalate to when there is a problem. • Refer to and understand the escalation plan.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Action plan for clinical deterioration					
Demonstrate how to correctly place a saturation probe.	Can demonstrate: • How to and where to correctly place and secure a saturation probe. • How frequently the probe site should be changed, especially if on continuous monitoring. • How skin temperature e.g., cold extremities can have an effect on the reading of the saturation probe. • Can identify a good trace/signal on the monitor.				
Demonstrate an awareness of expected oxygen saturation levels for CYP.	Can state the CYP's expected oxygen saturation level. Can identify which number relates to oxygen saturation level and which number is the heart rate and where to record this, if applicable. Can set the parameters and alarms on the oxygen saturation monitor (if applicable).				
Knowledge of current oxygen requirement (if applicable).	Can identify CYP's current oxygen requirement and how that is given e.g. by walled oxygen, concentrator or oxygen cylinder. Awareness of who provides that oxygen when in the home/community environment. Be aware of the PPLOG (Paediatric Pan London Oxygen Group) competencies and completed (this will be down to local guidance).				
Discuss the steps to be taken if the oxygen saturations are low/poor trace.	Can describe the steps to be taken if the oxygen saturations of the CYP are low or if there is a poor trace. For example, is this due to movement of the CYP? Is the CYP's circulation poor so the probe is struggling to work. Is the probe flashing and indicating that it may need replacing? Actions to take if the saturations remain low- refer to emergency procedures and or the escalation plan. Understands who to report/who to contact when concerned.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy care-emergency procedures (only tracheostomy BLSi to sign off this section)					
Discuss and understands the rationale for the emergency equipment to be carried and accessible at all times.	Caregiver can state the items that should be in the emergency box and any additional equipment: • Spare tube the same size/style, half a size smaller (Shiley), tapes, lubricating jelly, suction catheter and scissors. • Any additional equipment that's required to manage an emergency such as LMA, pocket face mask, BVM, syringes, 3-way taps. • Fully working suction unit and suction catheters (of appropriate size) should be readily available/carried with the CYP **at all times**. • Oxygen and ancillaries (as/if required). • Nebuliser machine and ancillaries (as/if required).				
Discuss and demonstrate the use of additional emergency equipment (as applicable).	• Velcro tapes for a single person to secure the tube after an emergency/ unplanned event. • Resuscitation Laerdal one way valve to deliver breaths and to protect the rescuer from secretions going into their mouth. • Disconnection wedge assists the easy removal of adjuncts attached to the tracheostomy. • Any specific equipment to manage the CYP airway in an emergency such as LMA, pocket face mask, BVM, syringes, additional tube e.g., Tight to shaft for a fome cuff tube.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed / Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy care-emergency procedures (only tracheostomy BLSi to sign off this section)					
Able to identify and are familiar with care plans and emergency escalation plans.  	• This could include bedhead (hospital specific/NTSP) Appendix Six and Seven and CYP specific care plans (Appendix Ten). • Below are the emergency response algorithm (Appendix Eight and Nine).  				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy care-emergency procedures (only tracheostomy BLSi to sign off this section) **When completing BLS training use simulation with caregivers, simulate and practice different scenarios, i.e. dealing with an emergency event in the bath, in the pushchair, during a tape change. Practise using the equipment, practice the seldinger technique, discuss contents of the emergency box and how to use the equipment.**					
Discuss potential emergency situations e.g., blocked or dislodged tracheostomy and the appropriate management of these and when to call for help e.g., emergency buzzer, 2222 or 999.	Can discuss potential reasons why a tracheostomy tube could become dislodged and/or blocked which could include (but not exhaustive): • Tube not secure e.g., ties too loose. • Equipment attached to the tube is weighing the tube down/pulling it out e.g., oxygen tubing or ventilator tubing. • CYP may pull at tube. • The tube could be too small in size or length and the CYP moves, and it accidentally dislodges. • Thick secretions. • CYP has vomited/aspirated/oral secretions. • Foreign body. Caregiver can demonstrate appropriate management which would be to follow the emergency algorithm to replace the tracheostomy tube, identifying when help needs to be called e.g., as soon as possible and can communicate what has happened.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy care-emergency procedures (only tracheostomy BLSi to sign off this section)					
Watch emergency event management podcast or alternative.	Date watched: https://www.gosh.nhs.uk/wards-and-departments/departments/clinical-specialties/tracheostomy-information-children-parents-and-healthcare-professionals/training-videos/				
Can complete basic life support training as per Resus Council Guidelines (see Appendix Nine and Ten).	Can identify and manage: •A blocked tracheostomy tube including partial and complete blockage (4 S assessment, ABC). •A dislodged/decannulated tracheostomy tube. Actions on replacing a tracheostomy tube - Can perform/demonstrate the seldinger technique. Can confidently utilise emergency equipment e.g. BVM, pocket mask and/or one-way Laerdal resuscitation valve. (This will be discussed with you on an individual basis.) Understands how to manage the emergency event if the CYP does not have a known upper airway. Use of LMA/ Face mask over the stoma to ventilate (if applicable) watch the NTSP video of how to use an LMA/ face mask https://www.youtube.com/watch?v=xVzCpWHoeNs Watch GOSH podcast (or alternative).				
Can perform a single person tracheostomy tube change.	Can discuss positioning and management of a single-handed tube change on CYP and how to secure with Velcro ties (cotton ended only).				
Can perform mouth to tracheostomy ventilation utilising a one way (Resuscitation) valve.	**Caregiver should always be taught mouth to tracheostomy ventilation as first management.** Caregiver understands the reason for using the one way valve resuscitator, can attach to the tracheostomy and can deliver breaths at the correct ratio- incorporate into the resuscitation algorithm.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Tracheostomy care-emergency procedures (only tracheostomy BLSi to sign off this section)					
Demonstrate safe technique in supporting ventilation using a self-inflating bag e.g., bag valve mask.	**Caregiver may also be taught additionally to utilise a bag valve mask as appropriate (see below). Mouth to mouth may also be taught and practised but this will be discussed with you on an individual basis.** Discuss and identify the reasons for requiring hand ventilation e.g. emergency situation, back up for the ventilator. Can identify the risks of utilising a self inflating bag: • Over/excessive ventilation can cause trauma to the lungs (known as barotrauma). • Excessive/incorrect ventilation can distend or fill the stomach with air which reduces the effectiveness of ventilation to the lungs and can cause contents from the stomach to enter the lungs. • Hypoventilation or inadequate ventilation due to poor use of the bag, caregiver able to recognise this and correct the technique.				
Demonstrate how to check and set up equipment needed to hand ventilate. This is not applicable for all CYP, the method or delivering/supporting breaths will be discussed with you at the time of training.	• Demonstrate how to check the integrity of the bag and reservoir. • Discuss what size bag valve mask to use, why and when this should be upsized. • Demonstrate how to connect to the oxygen, turn the oxygen on to 15L and fill the reservoir bag. (Complete local oxygen competencies e.g., PPLOG). • Demonstrate connecting to tracheostomy tube and deliver breaths at the appropriate rate and depth as per resuscitation algorithm. • Discuss and identify the importance of the pressure valve- this valve “pops” up to prevent the user providing too much pressure to the CYP and causing trauma to the lungs. • Discuss and demonstrate using alternatives such as face masks, connectors as applicable. • Has completed emergency event SIM training (i.e.: accidental decannulation, blocked tube, seldinger technique, stoma care, BVM/one way valve practice).				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed / Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Travel and transport					
Able to discuss and be aware of additional risks that need to be considered to ensure CYP safety is maintained when out of hospital ward/home environment. PREPARED	It is likely that a CYP is going to need to move from one department to another in a hospital/healthcare setting during their stay. Once out of hospital, the CYP will be leaving the home environment to access normal daily activities such as shopping, play, leisure and school. **The key to keeping the CYP safe is Be <u>Prepared</u>!** **B**e appropriately trained and confident to provide all aspects of CYP's tracheostomy care. **E**nvironment - Think about the place CYP is going to. What facilities are there that you could make use of? Mains power, easy access, extra space, lifts, familiarity, other trained adults? What potential risks are associated and how could these risks be managed e.g. • Beach- sand that could enter the tracheostomy tube. • Relative/friend house with open fires and use of oxygen. • Outpatients appointment and transport- is there space to respond to an emergency. • Out for a walk and lack of additional power supply. • Cinema is dark , do you need to take a torch? **P**ack your bags carefully and sensibly- all essential equipment and supplies must be easily accessible. **R**e- think travel/journey/activity if CYP unwell/unstable. **E**mergency equipment must be checked pre- journey, appropriately charged and easily accessible. **P**repare for emergencies–understand action to take for clinical emergencies, escalation plans, equipment failure, fire evacuation, car breakdown etc. Have you got back up if required or if you become unable to care for CYP? **A**lternative power sources/equipment in the event of failure: back up batteries, car chargers, back up equipment/manual suction machine. Always remember to take the mains lead. **R**e-stock and re charge your equipment when you return. **E**nsure you take sufficient supplies e.g. suction catheters, oxygen, nebuliser solution. **D**riving. Consideration to what you would do if the CYP needs attention and planning ahead for that e.g. use of mirrors to have a clear view of CYP at all times. Knowing your route so, if needed, you can safely get off the road to provide care. Having another person in the car who is able to provide that attention. Consider what you would do if your vehicle broke down. Securing equipment in the car.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed / Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Travel and transport					
Able to calculate amount of oxygen required for duration of the outing. BOC Medical Cylinder data chart: Cylinder code=capacity in litres. AZ 170litres C 170 litres D 340 litres CD 460 litres E 680 litres J 6800 litres	Journey time X prescribed O2 requirement = Total amount needed for journey, double the amount for safety. For example, the CYP is on 2L/min O2 and it going out for 60 mins. Therefore, they need 60 x 2=120ltrs of oxygen. Double this so 120 x 2 = 240ltrs to cover you in the event the trip is longer than expected.				
Understands the importance of ensuring all equipment is working, adequately charged, power leads are readily available and the importance of taking enough equipment out with you.	Caregiver can discuss the action/who to contact if the equipment fails whilst out. Discuss the actions to be taken in the event of an emergency: • Blocked tube/decannulation. • Equipment fails/oxygen runs out/battery fails. • Forgets emergency equipment. • Run out of disposables (i.e. suction catheters).				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Travel and transport					
Able to safely secure equipment onto wheelchair/buggy and into vehicle.	Caregiver can safety load equipment onto the buggy/wheelchair whilst it still being easily accessible and usable. Awareness of weight safety limit on buggy/wheelchair and what equipment may need to be carried. Caregiver can strap equipment onto the wheelchair/buggy when in a vehicle or if CYP is in a car seat securing the equipment safety in the vehicle. Assuring loose equipment e.g. oxygen cylinder is secured.				
Discuss and demonstrate how tracheostomy care can be delivered in wheelchair/buggy/vehicle	Discussions regarding carrying out tracheostomy care e.g. suctioning, tape and tube changes whilst the CYP is in buggy/wheelchair/vehicle. This will be risk assessed per CYP and discussed with you on an individual basis.				

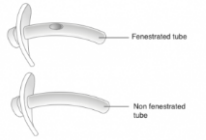
The next sections cover the usage of cuffed tracheostomy tubes, double lumen tubes, subglottic ports and speaking valves. These are speciality tubes and won't be applicable to all so please only complete those which are appropriate for the caregiver and the CYP involved.

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Care Giver Sign and date when confident with skill
Cuffed Tracheostomy Tubes					
Can identify and discuss the differences between a cuffed and uncuffed tube and the management of these.	• Discuss the reasons why a cuffed tube would be used rather than an uncuffed tube (e.g., aspiration, protect lower airways, support ventilation) • Discuss the complications of cuffed tubes and how to mitigate these: for example, TTS- deflate every 2-4 hours to take pressure from the tracheal wall (this will be discussed with you). Check the air cuff pressure using the manometer. • Discuss and demonstrate the cuff management plan (i.e., timings of deflations, time off from the cuff, the specifics and how to deflate cuffs i.e., safety implications) include details in the escalation plan. • Discuss the safety implications of the CYP having a cuffed tube: i.e., what extra equipment is required to manage the cuff and refer to the safety plan accordingly. • Demonstrate and explain procedure for inflating, deflating and monitoring the cuff pressure. • Explain risks and indications for cuff deflation:- i.e., secretions above the tube may fall down into the lungs- demonstrate the correct process of deflating tubes/suctioning first and after deflation. Discuss oral suction and whether this is to be carried out. • Discuss and demonstrate the correct way to deflate a cuff: i.e., TTS do not aspirate or pull on the syringe, allow the syringe plunger to move by itself and deflate the cuff, fome cuff ensure you are using a 3-way tap, for an air cuff use the manometer.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a Cuffed tracheostomy tube					
There are 3 common cuffed tubes used in paediatric: TTS, Air cuff, Fome cuff. Tight to shaft (TTS water Cuff)	Caregiver is to understand: • The need for a TTS and why this tube was chosen. • This cuff is a high-pressure cuff and must be deflated regularly to protect the tracheal lining. • The cuff is filled with sterile water. • The cuff is inflated with the minimum (not default amount) amount of water that manages the issue (i.e., supports the ventilation leak). • And demonstrate the importance of 2-4 hourly cuff deflations and knows how to deflate the cuff safely as per local guidelines. • And discuss suctioning before and after deflation and the importance of this. Discuss the need for oral suction as per local guidelines. • What to observe for whilst the cuff is deflated. • And demonstrate inflating the cuff correctly- discuss volumes to be inserted. • The pressure cannot be monitored and therefore regular deflations are essential to maintain a healthy and intact trachea.				
AIR Cuff	Caregiver is to understand: • The need for an air cuff and why this tube was chosen. • This cuff is a low-pressure cuff. • The cuff is filled with air using a manometer. • The cuff is inflated with the minimum (not default amount) amount of air that manages the issue (i.e., supports the ventilation leak). • And demonstrate the safe use of inflating the tube using a manometer and that they understand the volumes to use (stay in the green in most cases). • And demonstrate the importance of cuff deflations and knows how to deflate the cuff safely (using a syringe/manometer). Discuss suctioning before and after deflation and the importance of this. Discuss oral suctioning. • What to observe for whilst the cuff is deflated. • And demonstrate inflating the cuff using the manometer. • And demonstrate how the pressure can be monitored safely using the manometer to maintain a healthy and intact trachea.				

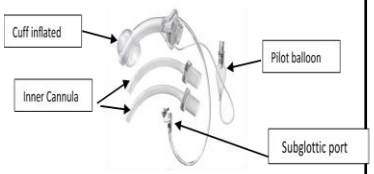
Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a Cuffed tracheostomy tube					
FOME CUFF	Caregiver is to understand: • A fome cuff is used for many reasons, the main one being that the CYP are aspirating, and it helps prevent secretions from falling into the lower airways/lungs so protecting them. • The need for a fome cuff and why this tube was chosen for the CYP. • This cuff is a low-pressure self inflating cuff. • The cuff self inflates so there is NO need to inflate using a syringe or manometer. • And demonstrate the importance of cuff deflations and knows how to deflate the cuff safely (using a syringe/3-way tap). Discuss suctioning before and after deflation and the importance of this. Discuss the need for oral suctioning. • A sub glottic port can be fitted to this tube if there are copious amounts of secretions collecting above the cuff. If applicable discuss and demonstrate how to manage this if one is attached. • And demonstrate how to aspirate secretions from subglottic port and to flush a blocked port. • What to observe for whilst the cuff is deflated. • The importance of ensuring the red port is left open AT ALL times. Discuss the complications if this port is closed. • And be aware of the extra equipment required in the emergency box to support an elective and emergency tube change (syringe, 3-ways tap). • And demonstrate the safe set up of emergency equipment and able to use the 3-way tap correctly. • And demonstrate the removal of a fome cuff tube. • The amount of pressure and technique of removing the fome cuffed tube. • The replacement tube for an emergency tube change is a TTS (not a fome cuff). • The fome cuff tube changes can be traumatic and uncomfortable for the CYP and can cause trauma to the stoma e.g., splitting. Caregiver to observe for bleeding/colour changes post tube change. Discuss the potential need for cauterization following a fome cuff change. • And know what to do if the inflation port gets damaged/broken off and you are unable to deflate the cuff. (Demonstrate the use neoflon to deflate/hold open using the 3-way tap).				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a Cuffed tracheostomy tube					
Can recognise and identify reasons for cuff leak and how these are managed.	Can identify how you would know if a cuff was faulty e.g., not appropriately inflating/quickly deflating, CYP not ventilating adequately and how you would escalate this e.g., community team, NIC/medical team.				
Awareness of on-going cuff management plan.	Caregiver is able to state CYP's cuff management plan and when this plan needs to changed e.g., if CYP unwell.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a double lumen tracheostomy tube					
Understands the rationale of the use of a double lumen tracheostomy. These tubes can be cuffed (air) and uncuffed   	These tubes can be fenestrated or non- fenestrated. A fenestrated tracheostomy has a hole or holes along its length to allow air flow around and through the tracheostomy up through the upper airway. Fenestrated tubes come with 2 types of inner tube: one with holes matching the holes of the tracheostomy (fenestrated inner tube) and one with no holes (non fenestrated inner tube). Having a fenestrated tube may allow the CYP to vocalise effectively. Caregiver is to understand: • The need for a double lumen tube and why this tube was chosen. • This cuff is low pressure. • The cuff is filled with air using a manometer. • The cuff is inflated with the minimum (not default amount) amount of air that manages the issue (i.e., supports the ventilation leak). • And demonstrate the safe use of inflating the tube using a manometer and that they understand the volumes to use (stay in the green in most cases). • And demonstrate the importance of cuff deflations and knows how to deflate the cuff safely (using a syringe/manometer). Discuss suctioning before and after deflation and the importance of this. Discuss oral suctioning. • What to observe for whilst the cuff is deflated. • And demonstrate inflating the cuff using the manometer. • And demonstrate how the pressure can be monitored safely using the manometer to maintain a healthy and intact trachea.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a double lumen tracheostomy tube					
Can explain difference between the types of inner cannula and know which type should be in situ when suctioning.	Prior to suctioning, inner tube must be changed to non-fenestrated inner cannula. Not doing this can allow the suction catheter to pass through the hole/holes and cause trauma to tracheal wall of give the false impression that the catheter will not pass. Caregiver can discuss and identify the differences between the fenestrated and non-fenestrated tubes (can identify cannula which is which). Demonstrate changing and securing of the inner cannula tubes and can articulate the importance of an inner tube in situ at all times.				
Understands the need for cleaning of inner cannula, how to clean & frequency of cleaning required. 	Caregiver can discuss the inner tube should be changed as a minimum 4 hourly, however if secretions are thick and sticky in consistency, frequency of cleaning should be increased and humidification as well as hydration assessed. Caregiver can: • Discuss and demonstrate how to remove the inner cannula. (Some inner cannula can be removed by simply twisting to the right, similar action to unscrewing a bottle top. Others just click and pull out using the ring pull.) • Discuss when the fenestrated and non- fenestrated inner cannulas should be in situ, i.e. suctioning, resuscitation must be non- fenestrated, vocalisation fenestrated to facilitate voice. • Discuss and demonstrate cleaning (sterile water, leave to dry naturally- use cleaning swabs as necessary). • Discuss the importance of using soft swabs to prevent damage to the surface of the tube e.g. groves that can accumulate secretion and the increased risk of infection.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a double lumen tracheostomy tube					
Emergency care with a double lumen tube.	Caregiver can demonstrate: • Instructions as per above. • For resuscitation the non- fenestrated inner tube must be in situ. • If the inner tube is blocked –change it- there is no need to change the whole tube. • Ensure an inner tube is in at all times.				
Subglottic suction port.	Tracheostomy tubes with subglottic suction port enable secretions to be removed above the cuff. This helps to keep the CYP airway clear and unobstructed as well as reduce chest infections. Under direct supervision from a speech and language therapist, a subglottic port also enables the CYP to voice in the presence of an inflated cuff. Medical air/oxygen is entrained through the subglottic port and when the thumb control port is occluded, the medical air/oxygen flow is directed over the vocal cords. This facilitates voice. This practice is more commonly used in older CYP's and utilised in rehabilitation centres.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a subglottic port					
Able to safely/effectively aspirate subglottic suction port and troubleshoot if this port was to block.  10ml syringe  	Secretions can be removed using the subglottic port (frequency will be discussed) either via continuous or intermittent suction. Continuous suction above the cuff should be avoided (more commonly seen within intensive care setting) and should only be used for CYP when directed by their medical team. As with all suction procedures, there is associated risk of mucosal injury. Pressures should be limited to the lowest/most effective pressure which should be guided by the team managing the CYP tracheostomy. This will be less than the limit used for normal tracheostomy suctioning. Removing above cuff secretions via syringe: • Insert 10ml syringe into subglottic port. • Gently pull the plunger towards you to collect the secretions and remove syringe when completed. • Document amount of secretions removed. Via wall suction: • Insert the thumb control valve into the subglottic port. • Connect the suction tubing to the thumb control valve. • Set the wall pressure gauge to low pressure. • Perform intermittent suctioning by briefly occluding the thumb control valve on the suction line. • Remove thumb from the port and if further suctioning is required repeat procedure. • Stop suctioning once the majority of secretions have been cleared. Do not continue to suction if only minimal amounts of secretions are present due to the risk of trauma to the upper airway. Caregiver to demonstrate intermittent suctioning using a syringe following above procedure. Caregiver to demonstrate changing pressure and applying continuous suctioning.				
Able to safely/effectively aspirate subglottic suction port and troubleshoot if this port was to block.	If port becomes blocked, insert 3-4 ml of air via 10 ml syringe through the line to remove secretions. Alternatively push 1ml of sterile water into the port and then remove using the same syringe and discard. Both should be used with caution and with direct guidance from CYP medical team. Caregiver to demonstrate how to unblock the port following above guidance.				

Performance criteria and knowledge required	Comments/Guidance	Observed/ Discussed/ Practised Date:	Performed/ Discussed with support Date:	Achieved/ Independent practice Date:	Caregiver Sign and date when confident with skill
Care of a One–way (speaking) valve – A one way valve assessment must be part of a MDT review, i.e., SALT/Specialist nurses/Respiratory/ENT teams and the sign off should be supported by this group.					
Able to explain how one-way valves work and contraindications for their use.	The valve opens to allow the CYP to breathe in through the tracheostomy tube. When they breathe out the valve closes. This diverts the air up through the voice box, (larynx) throat and mouth/nose. Normally. a one-way valve wouldn't be used with cuffed tracheostomy tubes. However there maybe exceptions e.g., for a CYP who has the cuff deflated during the day and a cuffed fenestrated tube. This will be discussed with you separately. **Caregiver understands when never to use a one-way valve:** • **Unconscious or unwell CYP.** • **Foam cuffed tracheostomy (or if cuff is inflated at anytime).** • **Upper airway obstruction.** • **Age appropriate sized tube.** • **Thick and copious secretions .** • **Aspiration.** • **Sleeping.** • **Anything else that may compromise the airflow around the tracheostomy tube- this will be discussed with you**.				
Understand importance of following CYP specific guidelines.	One-way valve plans are put in place by the CYPs Speech and Language Team who will have assessed the CYP and their tolerance to the one-way valve. Caregiver can state specific plans/timing for CYP's valve usage.				
Understands additional monitoring / assessment requirements when valve in situ.	Caregiver is aware to monitor the CYP's changes in: • Work of breathing. • Oxygen saturation levels. • Heart rate. • Consistency and amount of secretions. One-way valves can cause drying of secretions so may need to increase frequency of nebs when off the valve or remove valve and replace with HME for periods during the day. • Comfort/anxiety/distress levels. Caregiver to understand that they must remove valve immediately if breathing becomes compromised.				
Awareness of the cleaning and maintaining required for a one-way valve.	Caregiver aware: Wash the valve at least once a day in warm soapy water and air dry thoroughly before reusing. The one-way valve should be replaced as per manufacturer's recommendations – e.g. every 3 months or if damaged.				

Tracheostomy Competency Completion Record

I certify that (name of assessor) …… has reviewed the enclosed competency document and all of the competencies have been achieved to the required level and assessed by an experienced member of staff. Each assessor is competent to conduct and assess training in tracheostomy care.

Print full name…… Role…… Signature…… Date……

I certify that I (name of caregiver)…… have undergone a period of theory and practical training and I am confident and competent in the skills detailed in this booklet. I will only use this training in respect to the CYP named on the front of the booklet and I will not carry out any procedures that have not been covered by this training. I will continue to update my knowledge and seek advice from appropriate individuals if I require further training

Print full name…… Role…… Signature…… Date……

Appendix One.

T

Tapes – Keep tube secure

Ensure the tension of the tapes is tight enough to support the tube
One finger should fit comfortably between the child's neck
and the tapes.

R

Resus – Know the resuscitation process

- **Safety, Stimulate, Shout for help**
- **SUCTION airway** – If the tube is difficult to suction or is blocked, change the tube, suction again,
- **Check for breathing.** If required, use the self-inflating bag ventilation device with the Portex swivel connector to give rescue breaths, then follow BLS algorithm for circulation.

A

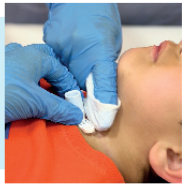
Airway clear – Use correct suction technique

Use correct catheter size and length of suctioning.
Know the length of the child's tube and only suction just beyond it, i.e. To allow the lateral and distal holes beyond the tube tip.
The catheter size should be 'double the size of the tube'.
For example, an 8 FG catheter for a 4.0 ID tube.

C

Care of the site – Stoma and neck

Trache site should be cleaned at least daily and any breakdown noted and treated. Don't forget the back of the neck!



H

Humidity – Essential to keep tube clear

Must use either the water system or an HME. If it is the water system no more than 6 sections of tubing and check that water droplets are present throughout the tubing. Use warmed humidity systems for small babies who are at risk of heat loss. Use the Correct size Heat and Moisture Exchanger (HME – Swedish Nose).

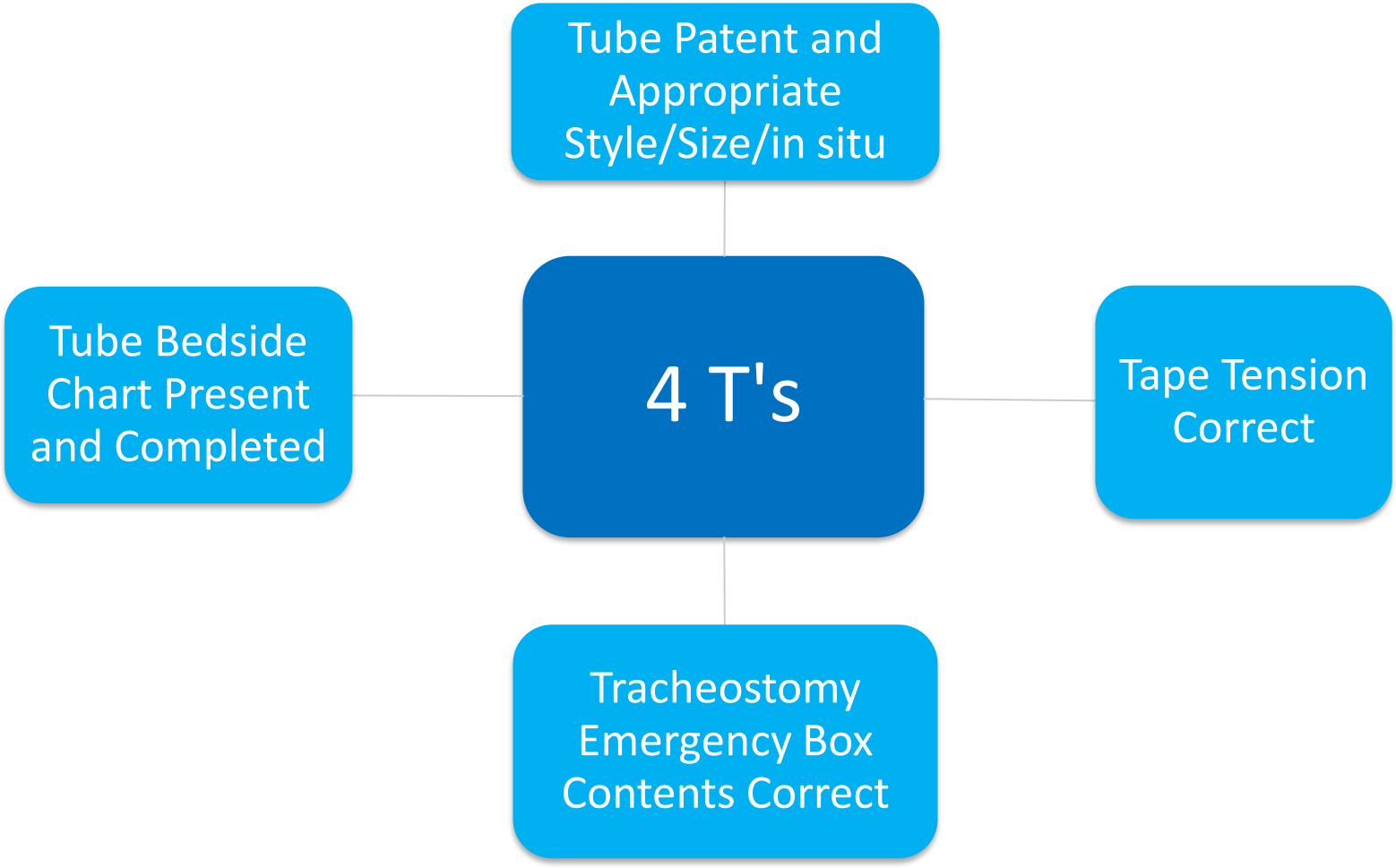
E

Emergency box – Have the box present

Emergency box should only contain the correct equipment.
Equipment list is inside the lid of the box.
No other items should be present.

Podcasts Link
https://www.gosh.nhs.uk/wards-and-departments/departments/clinical-specialties/tracheostomy-information-children-parents-and-healthcare-professionals/training-videos/

Remember the 4 T's of Tracheostomy Handover



Appendix Three.

Tracheostomy skin & stoma care pathway

NHS
Great Ormond Street Hospital for Children
NHS Foundation Trust

	Description	Cleanse	Dressing/Barrier
Normal skin	Intact skin with no Erythema.	0.9% saline & sterile gauze	■ Apply emoillent (eg. Diprobase cream in a thin layer around neck) if skin looks dry ■ Standard trache dressing to stoma site ■ Standard tracheostomy tapes
Mild & At Risk	Erythema with no broken areas & Intact skin at risk of breakdown from pressure, moisture or movement.	0.9% saline & sterile gauze	■ Apply Medihoney barrier cream in a thin invisible layer around the neck ■ Standard trache dressing to stoma site ■ Apply a single strip of Mepilex Transfer around the neck ■ Standard tracheostomy tapes
Moderate – Severe	Erythema of skin with broken areas caused by pressure, moisture or movement.	0.9% saline & sterile gauze	■ Consider wound gel to broken areas (eg medihoney wound gel) ■ Standard trache dressing to stoma site ■ Apply a single strip of Mepilex Transfer around the neck ■ Standard tracheostomy tapes
Infected/Colonized	Broken skin, which may have signs of infection such as: erythema, odour, swelling, heat, yellow/green/pus like exudate, pain.	Prontosan irrigation solution & sterile gauze.	■ Standard trache dressing to stoma site ■ Send skin swab for MC&S, medical team to consider starting antibiotics ■ Consider antimicrobial wound gel to broken areas (eg medihoney wound gel, promogran gel 10) ■ Thin silicone border dressing to broken area (eg biatain silicone, mepilex border etc) ■ Apply a single strip of Mepilex Transfer around the neck ■ Standard tracheostomy tapes ■ Silver antimicrobial dressings can be considered with specialist advice
Candida	Bright red rash with satellite lesions/pustules.	Prontosan irrigation solution & sterile gauze.	■ Standard trache dressing to stoma site ■ Send skin swab for MC&S. ■ Apply anti-fungal cream (eg Daktarin, clotrimazole, Daktacort) as per prescribing guidelines ideally allow to absorb for approx. 5 minutes before applying dressing) ■ Apply a single strip of Mepilex Transfer around the neck ■ Standard tracheostomy tapes
Stoma Breakdown	Erythema of the skin with broken areas caused by pressure, moisture or movement.	0.9% saline & sterile gauze Or if signs of infection: Prontosan irrigation solution & sterile gauze	■ For friction: Standard Trache dressing with silicone layer (eg.mepitel) underneath to reduce friction ■ For pressure and moisture damage: Foam tracheostomy dressing for management of moisture and secretions ■ Colonised/Signs of infection: send a skin swab for MC&S, seek advice for appropriate dressings and antibiotics
Hyper granulation	Exuberant granulation tissue or proud flesh: can be caused by antimicrobial colonisation or friction/ movement of a device.	0.9% saline & sterile gauze Or if signs of infection: Prontosan irrigation solution & sterile gauze	■ Consider application of a steroid cream (needs to be prescribed) or cautery with silver nitrate by a competent professional. ■ Standard trache dressing or if highly exudating use a foam tracheostomy dressing to stoma site

Stoma

Please contact Tracheostomy CNS on ext 4177
In Tracheostomy CNS absence contact on-call ENT SpR via switchboard on ext 5000
For pressure ulcers please make a consult order to Tissue Viability team via EPIC

Appendix Four.

BMI Healthcare
DECONTAMINATION

NHS Great Ormond Street Hospital for Children NHS Foundation Trust

Standard Operating Procedure for Sending Bivona Silicone Tracheostomy tubes for Sterilization

To ensure traceability of all tracheostomy tubes from their receipt at BMI and back to GOSH and association of tracheostomy tubes with patients.

Place the used\New tracheostomy tube into a polythene bag with the yellow tag (after first reprocessing) and fill in the form

Sending used\New Bivona Silicone Tracheostomy tubes for Sterilization Form

This form must be sent with the item and a copy kept on the ward.

- Always send the provided yellow barcode with the used tube. The barcodes will be provided by BMI for each new tube on its first reprocessing at BMI.
- Keep a copy of 'Sending Tracheostomy Tubes for Sterilisation' form and place a copy in the bag with the tube.
- Bring the tracheostomy tube in the Dirty Trolley Room located on level 1 Southwood Building (room number C1042).
- Scan the barcode into Health edge and place the tube into the instrument trolley.
-

Used Tracheostomy tubes can only be tracked if the yellow barcode is kept with the tube

- Once a tracheostomy tube is received at BMI for its first reprocessing, BMI will decontaminate the tracheostomy tube and allocate a specific bar code number that will allow traceability of the tube. A yellow barcode tag with the bar code number will be provided and placed in a pouch with the tube.
- Tracheostomy tubes send to BMI for repeated reprocessing need to be always sent with the yellow barcode allocated to this tube.
- The tracheostomy tube will be returned to GOSH and the porters will deliver them to the ward sterilised and ready for use on the patient

If you have any questions, please contact:

1. Customer Liaison Officer on 07714 845463 or email aakash.kanani@BMIHD.co.uk
2. BMI on 01622 714710 or email GOSH@bmihd.co.uk

BMI Healthcare
DECONTAMINATION

NHS Great Ormond Street Hospital for Children

Sending Bivona Silicone Tracheostomy tubes for Sterilization

- Bivona silicone tracheostomy tubes can be re-sterilised up to 5 times for Children's tubes and up to 10 times with the adult range (tubes are **single patient use** so it's essential that the tubes are only used and returned to the **same patient**) – Practitioners MUST ensure that the child receives their correct tubes back so please complete all the information required below.
- Always check the integrity of the tube before sending off for sterilisation and before re-use. Ensure ALL parts including the obturator are sent with the tracheostomy tubes.
- Refer to the SOP related to this form before sending tubes away for sterilisation. All wards/departments must keep a log/ copy of this form to confirm which tubes have been sent away and which have been returned.

1. Patient Hospital Number (eg: 41025667)

.....

2. Ward/department: (Panther Ward)

.....

3. To whom and where the tracheostomy tube needs to be returned too.....

(Return C/O Joanne Cooke on Panther Ward Level 6 Premier Inn Building)

.....

4. Type/style of tube (include number of inner cannulas/ obturator present) ...

(x 1Smiths Portex Adult 5.0 double lumen trachy tube x 1 outer tube, x 2 inner tubes, x 1 obturator)

.....

.....

.....

Name (print).....Signed.....Dated.....

x----------x

Complete once tube has been returned from BMI

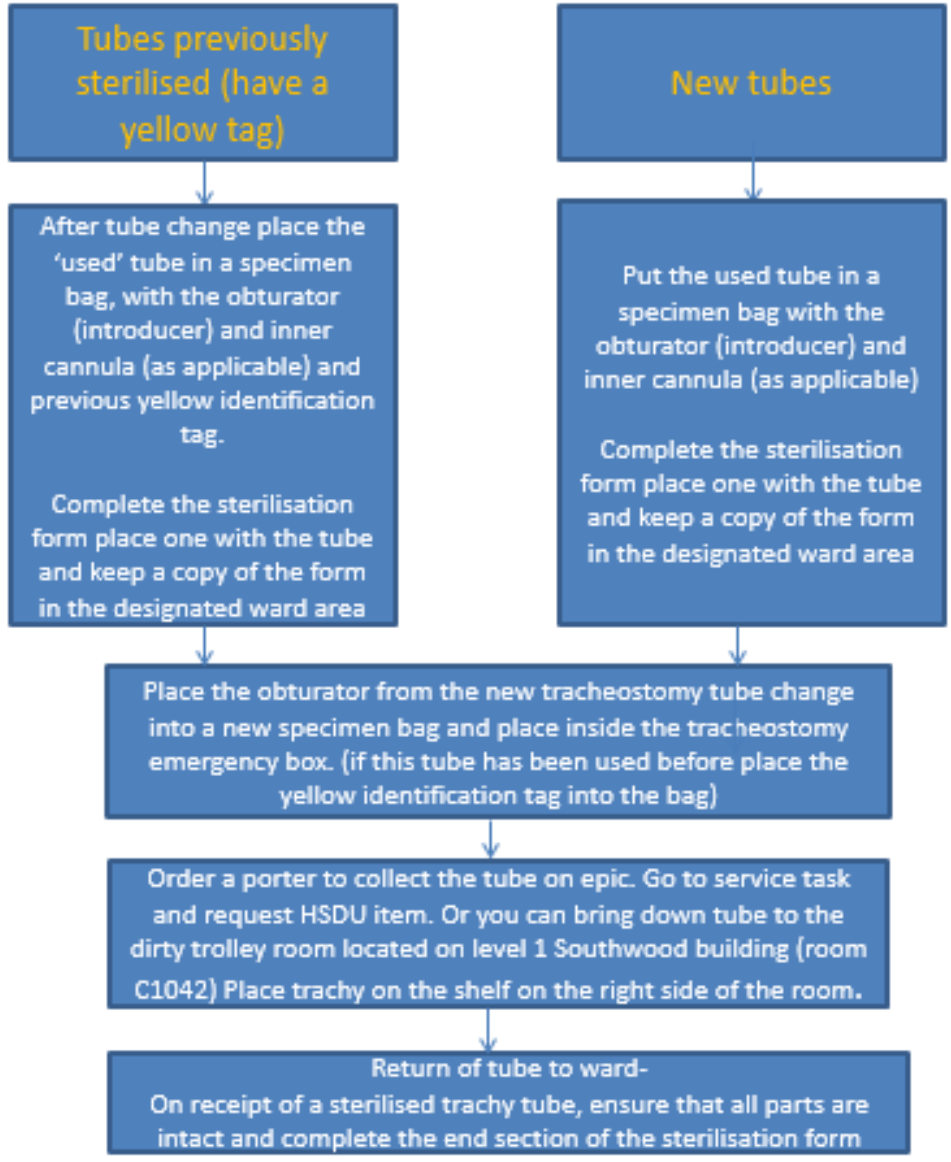
Confirm that you have the correct tube for the correct child **Yes/ No**

Confirm all parts of the tube are included **Yes/No**

Confirm the integrity of the tube/ parts/ cuffs and/or obturator) **Yes/No**

Name (print).....Signed.....Dated.....

Sterilisation of Tracheostomy Tubes- Algorithm.



Appendix Five.

smiths medical

Smiths Medical
6000 Nathan Lane N
Minneapolis, MN 55442
T: 763 383 3000
F: 763 383 3679
www.smiths-medical.com

17 April 2020

Dear Valued Customer,

This product information notice is intended to summarize the reprocessing instructions for all Portex® Bivona® tracheostomy tubes per the Instructions for Use (IFU). These reprocessing instructions are included in the IFUs accompanying the product.

The table below summarizes the acceptable methods outlined in the instructions for use. The instructions below the table are an excerpt from one of the IFUs. Refer to the specific IFU for detailed instructions. Adjustable Hyperflex™ tubes cannot be reprocessed.

	Cleaning		Sterilization			
	Enzymatic Solution	Warm Soapy Water	Autoclave	HTM Washer/ Disinfector	Boiling	Baby Bottle Sterilizer
Adult Aire-Cuf® (750)	x	x	x	x	x	
Adult Aire-Cuf® Talk (755)		x	x	x		
Adult Fome-Cuf® (850)		x	x		x	
Adult Fome-Cuf® Talk (855)		x	x		x	
Adult TTS™ (670)	x	x	x	x	x	
Adult Cuffless (60A)	x	x	x	x	x	
Neo/Ped Fome-Cuf® (85N)		x	x		x	
Neo/Ped Aire-Cuf® (65N)	x	x	x	x	x	x
Neo/Ped TTS™ (67N)	x	x	x	x	x	x
Neo/Ped Cuffless (60N)	x	x	x	x	x	x
TTS FlexTend™ (67NFP)	x	x	x	x	x	x
Cuffless FlexTend™ (60NFP)	x	x	x	x	x	x
Hyperflex™ Cuffless (60AFHXL)	x	x	x	x	x	
Hyperflex™ Aire-Cuf® (75FHXL)	x	x	x	x	x	
Hyperflex™ TTS™ (67FHXL)	x	x	x	x	x	

Cleaning:
Note: During the cleaning process inspect the product for any signs of damage. Discard the product if there is any sign of damage.

A. Enzymatic Solution:

a. Following the instructions for use for an enzymatic solution (preferably using a neutral non-coloured and non-scented cleaner e.g. Ruhof 345APANS Endozyme AW Plus No Scent), remove all biological material from the tracheostomy tube, by soaking and gentle manual cleaning. This will require flushing through the tube bore and talk attachment tube (if fitted).

b. Inspect for any residual contamination and, if necessary, remove it by repeat soaking in enzymatic solution and then light rubbing with a soft cleaning implement.

B. **Warm Soapy Water:**

a. Conventional mild cleaning agents (e.g. washing up liquid) and hot water up to 65 °C can be used for hygienic homecare cleaning/disinfection.
b. Soak the tracheostomy tube and its obturator, separately, in a container of warm water containing a mild soap solution for 60 minutes. Ensure that the wash reaches all parts of the product to be cleaned. This may mean using a syringe to flush through the talk attachment tube (if fitted) and manipulating small tubes to ensure that the liquid does fully fill the bore.
c. Remove any contamination with a lint free swab. Small tracheostomy tube bores can be cleaned by pulling a small portion of a lint free swab through the tube.
d. Inspect for any residual contamination and, if necessary, repeat the soak and clean operations.
e. Rinse the tube inside and outside with clean warm water, flushing thoroughly with water and then air dry.

Sanitization:

A. **Autoclave**

a. Insert the obturator into the tube and wrap in protective lint-free cloth or place them in a sterilization pouch.
b. Sterilize in a gravity displacement steam autoclave at 121° C (250° F) for 40 minutes. These products have been validated under these conditions. Do not expose them to temperatures or durations in excess of this or product integrity may be compromised. Do not use deep vacuum "flash" or pulse vacuum cycles.

B. **HTM Washer/Disinfector/Dryer**

a. Place the product and its obturator separately in an HTM 2030/ISO 15883-2 compliant washer/ disinfector/dryer. Follow the manufacturer's instructions for a thermal disinfection cycle giving a minimum A_0 value of 600 (ref. ISO 15883-2). Ensure that the wash reaches all parts of the product to be cleaned. This will require flushing through the tube bore and talk attachment tube (if fitted).

C. **Boiling**

a. Remove the tube and the obturator from their container and place in a pan of rapidly boiling clean water.
b. Cover the pan and REMOVE IT FROM THE HEAT. Allow the water to cool to "hand hot" before removing the parts.

c. Handle the obturator by its handle and the tube by its neck flange.

D. Baby Bottle Sterilizer

a. Place the cleaned tube and obturator in an electric steam disinfector ("baby bottle sterilizer") e.g. Avent.
b. The sanitization process must be completed in accordance with the supplier's instructions for use.
c. Remove the tube and the obturator from their container prior to placement in the unit. The obturator must be placed in the unit alongside the tube, not assembled in the tube.
d. Items remain disinfected (if the sterilizer is unopened) for 1 or more hours as stated in the individual manufacturer's instructions.

Appendix Six.

Bivona Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque white silicone PVC. The silicone is reinforced with wire, producing a flexible tube that conforms to the shape of the trachea, and has a fixed flange which is kink resistant.

SPECIAL INSTRUCTIONS

Ferromagnetic coil precludes use during MRI, please change to a Shiley tube for scans

Ideal for children requiring long-term ventilation

Disconnection wedge must be used to facilitate separation from the tube

Changed – Monthly or PRN

The latex free-hydrophobic tube hinders protein adhesion thereby limiting secretion build up and bacterial colonisation

Tube can be sterilised in HSDU and re-used (5 times)

Ensure introducer kept with tube

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Emergency Box

Tube of the same size (Paed/Neo)
Tube ½ size smaller (Shiley)
Suction Catheter (same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Bivona Flextend Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque white silicone PVC. The silicone is reinforced with wire, producing a flexible tube that conforms to the shape of the trachea, and has a fixed flange which is kink resistant.

SPECIAL INSTRUCTIONS

Ferromagnetic coil precludes use during MRI, please change to a Shiley tube for scans

Ideal for children requiring long-term ventilation

Disconnection wedge must be used to facilitate separation from the tube

Changed – Monthly or PRN

The latex free-hydrophobic tube hinders protein adhesion thereby limiting secretion build up and bacterial colonisation

Tube can be sterilised in HSDU and re-used (5 times) Ensure introducer is kept with tube

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Emergency Box

Tube of the same size (Paed/Neo)
Tube ½ size smaller (Shiley)
Suction Catheter (same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Shiley Uncuffed Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque thermo sensitive PVC with a thin walled shaft, tapered tip and universal 15mm termination

SPECIAL INSTRUCTIONS

This tubes does **NOT** contain any metal and should be the tube used for MRI of the Head and Neck

Changed – PRN

Weekly Tube Changes

Shiley Tubes are not reusable and should **NOT** be sterilised and used again

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Emergency Box

Tube of the same size (Paed/Neo)
Tube one size smaller
Suction Catheter (same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Bivona TTS (Tight To Shaft) Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque white silicone PVC. The silicone is reinforced with wire, producing a flexible tube that conforms to the shape of the trachea, and has a fixed flange which is kink resistant. The cuff, when inflated, creates a seal between the tube and the trachea, protecting against aspiration and optimizing ventilation.

SPECIAL INSTRUCTIONS

Deflate 2 Hourly (minimise tracheal damage)

High Pressure Cuff Only Inflate with Water

Inflate cuff to the desired amount, based on ventilation/ lower airway protection requirements.

Each child will require different amounts.

Changed – Monthly or PRN

The latex free-hydrophobic tube hinders protein adhesion thereby limiting secretion build up and bacterial colonisation

Tube can be sterilised in HSDU and re-used (5 times) Ensure introducer is kept with tube

Clear Cuff

Fill with sterile water

"A Glass of Water is Clear"

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Emergency Box

Tube of the same size (Paed/Neo)
Tube ½ size smaller (Shiley)
Suction Catheter (same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors
TWO IV Syringes (one to remove tube, one to reinflate)
Water for Injection Ampule

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Bivona Aire Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque white silicone PVC. The silicone is reinforced with wire, producing a flexible tube that conforms to the shape of the trachea, and has a fixed flange which is kink resistant. The cuff, when inflated, creates a seal between the tube and the trachea, protecting against aspiration and optimizing ventilation.

SPECIAL INSTRUCTIONS

4 hourly pressure checks with a manometer

Only inflate with Air.

Inflate cuff to the desired amount, based on ventilation/ lower airway protection requirements.

Each child will require different amounts.

Changed – Monthly or PRN

The latex free-hydrophobic tube hinders protein adhesion thereby limiting secretion build up and bacterial colonisation

Ensure introducer is kept with tube

BLUE CUFF

Fill with Air

"The Sky is Blue"

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Emergency Box

Tube of the same size (Paed/Neo)
Tube ½ size smaller (Shiley)
Suction Catheter
(same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors
TWO IV Syringes
Water for Injection Ampule

Bivona Fome Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque white silicone PVC. The silicone is reinforced with wire, producing a flexible tube that conforms to the shape of the trachea, and has a fixed flange which is kink resistant. The cuff has auto-expanding foam which fills and conforms to the unique contours of the patient's trachea.

SPECIAL INSTRUCTIONS

3-Way Tap Readily Available Self-Inflating Cuff

IMPORTANT

The cuff is self-inflating, to remove or insert the tube; the cuff must be deflated and 'held' by turning off the three-way tap. DO NOT attempt to remove or insert the tube without deflating and turning off the tap

Changed – Monthly or PRN

The latex free-hydrophobic tube hinders protein adhesion thereby limiting secretion build up and bacterial colonisation

Tube can be sterilised in HSDU and re-used (5 times) Ensure introducer is kept with tube

Contact NP/ENT if the port is cut

RED CUFF

Danger

"Care for this tube with Caution"

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Emergency Box

Tube of the same size (Paed/Neo)
Tube ½ size smaller (Shiley)
Suction Catheter
(same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors
TWO IV Syringes
A Three-Way Tap
Spare Fome Tube – Same Size (Paed/Neo- is available) – Not in box – for Elective Changes

Montgomery 'T' Tube

Great Ormond Street Hospital for Children NHS Foundation Trust

Made of soft silicone tube that is shaped like a 'T'. The distinctive shape of the T-tube allows part of the tube to support (or stent) the upper airway, whilst the lower parts act like a tracheostomy tube, allowing the child to breathe easily and expel secretions.

SPECIAL INSTRUCTIONS

Ensure the correct portex adaptor is available for the Ambu Bag

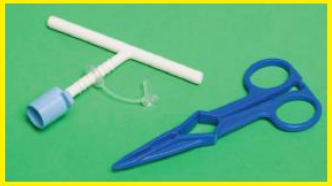
The anterior limb can be occluded/left open. Be familiar with resuscitation techniques – refer to CPC guidelines

DO NOT REMOVE the T Tube unless in an emergency – replace with a tracheostomy tube

Ensure that the ring is on the anterior limb AT ALL TIMES - this prevents the tube from falling into the stoma

Changed – PRN

Can be left in situ for months at a time and the tube is only changed under General Anaesthetic



STOMA CARE

Daily Clean

Slip the ring forward and clean and dry all around the T Tube.

Replace the ring so it is pressed up against the skin

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction length upper limb (to include anterior limb) ..... fg

Suction length lower limb (to include anterior limb) ..... fg

Catheter size ..... fg

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Emergency Box

Tube of the same size – refer to sizing chart to get equivalent size and convert Fg to mm (Paed/Neo -)
Tube ½ size smaller
Suction Catheter (same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors
Male to Female adaptor – must fit snuggly into T Tube
Blue clamps

Bivona Hyperflex Tracheostomy Tube

Tube Contains Metal

Great Ormond Street Hospital for Children NHS Foundation Trust

Made from opaque white silicone PVC. The silicone is reinforced with wire, producing a flexible tube that conforms to the shape of the trachea, and has a fixed flange which is kink resistant.

SPECIAL INSTRUCTIONS

Ferromagnetic coil precludes use during MRI

ADJUSTABLE FLANGE PERMITTING ALTERATION OF TUBE LENGTH

UNSAFE holding clip, therefore check the length does not alter (not for home use). Not recommended for longterm use. Must customise a fixed flange tube ASAP using customisation sheet.

Changed – Monthly or PRN

The latex free-hydrophobic tube hinders protein adhesion thereby limiting secretion build up and bacterial colonisation

Tube can be sterilised in HSDU and re-used (5 times)

Ensure introducer is kept with the tube

STOMA CARE

Daily/PRN tape changes must be carried out.

Use of cotton tapes and Trachi-Dress

Correction tension – one finger space between tapes and child's neck

Tube size ..... fg NEO/PAED (delete as appropriate)

Suction Length ..... cm Catheter Size ..... fg

Last Tube Change .../.../...

Contact Jo Cooke ANP bleep 0712 or ENT On Call bleep 1020 if you have any concerns

Emergency Box

Tube of the same size (Paed/Neo)
Tube ½ size smaller (Shiley)
Suction Catheter
(same size as suctioning)
KY Jelly
Tracheostomy Tapes
Round Ended Scissors

Depends on length - may keep a spare standard Bivona tube available ask NP/ENT)

This paediatric patient has a

NEW TRACHEOSTOMY

Patient ID: *Patient Label / Details*

Tracheostomy: Add tube specification including cuff or inner tube

_____mm ID, _____ mm distal length

Suction: _____ FG Catheter to Depth _____ cm

Indicate on this diagram any sutures in place

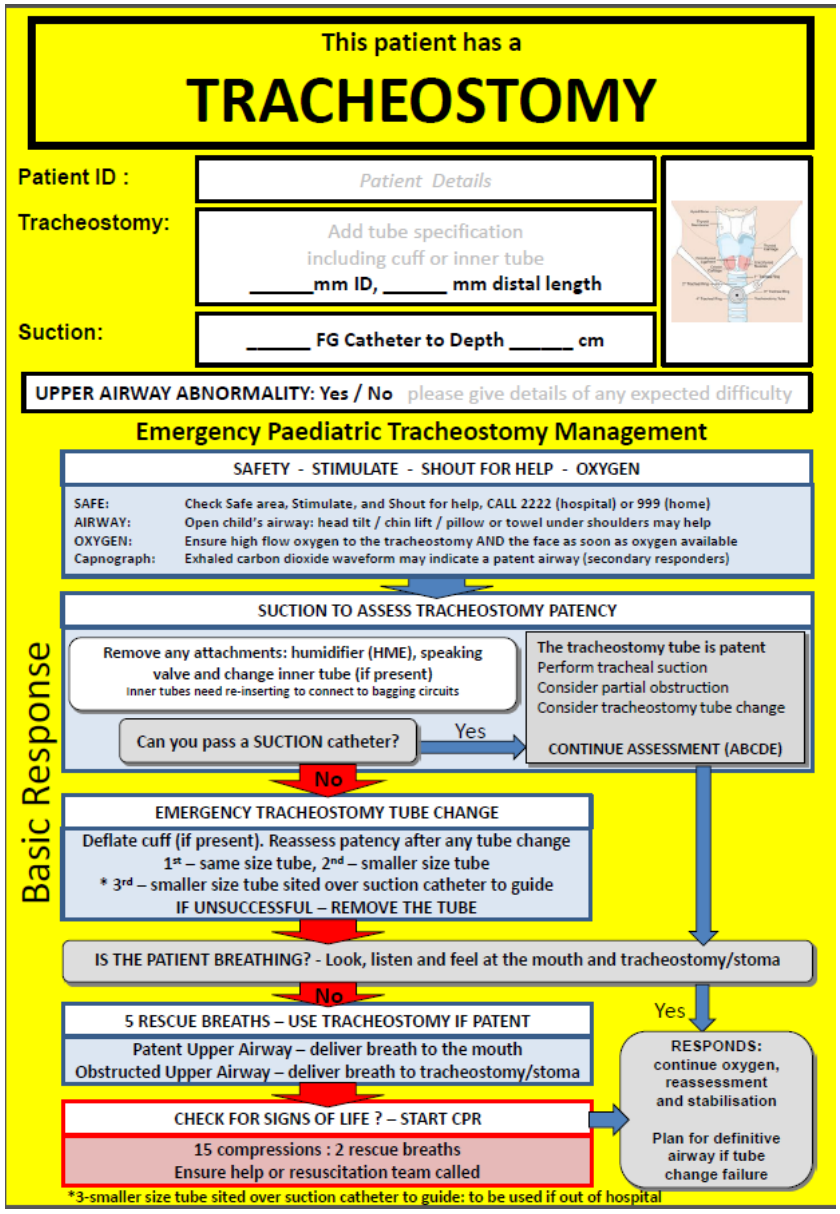
UPPER AIRWAY ABNORMALITY: Yes / No

Document laryngoscopy grade and notes on upper airway management or patient specific resuscitation plans

Due 1st tracheostomy change: ___ / ___ / ___ (by ENT ONLY)

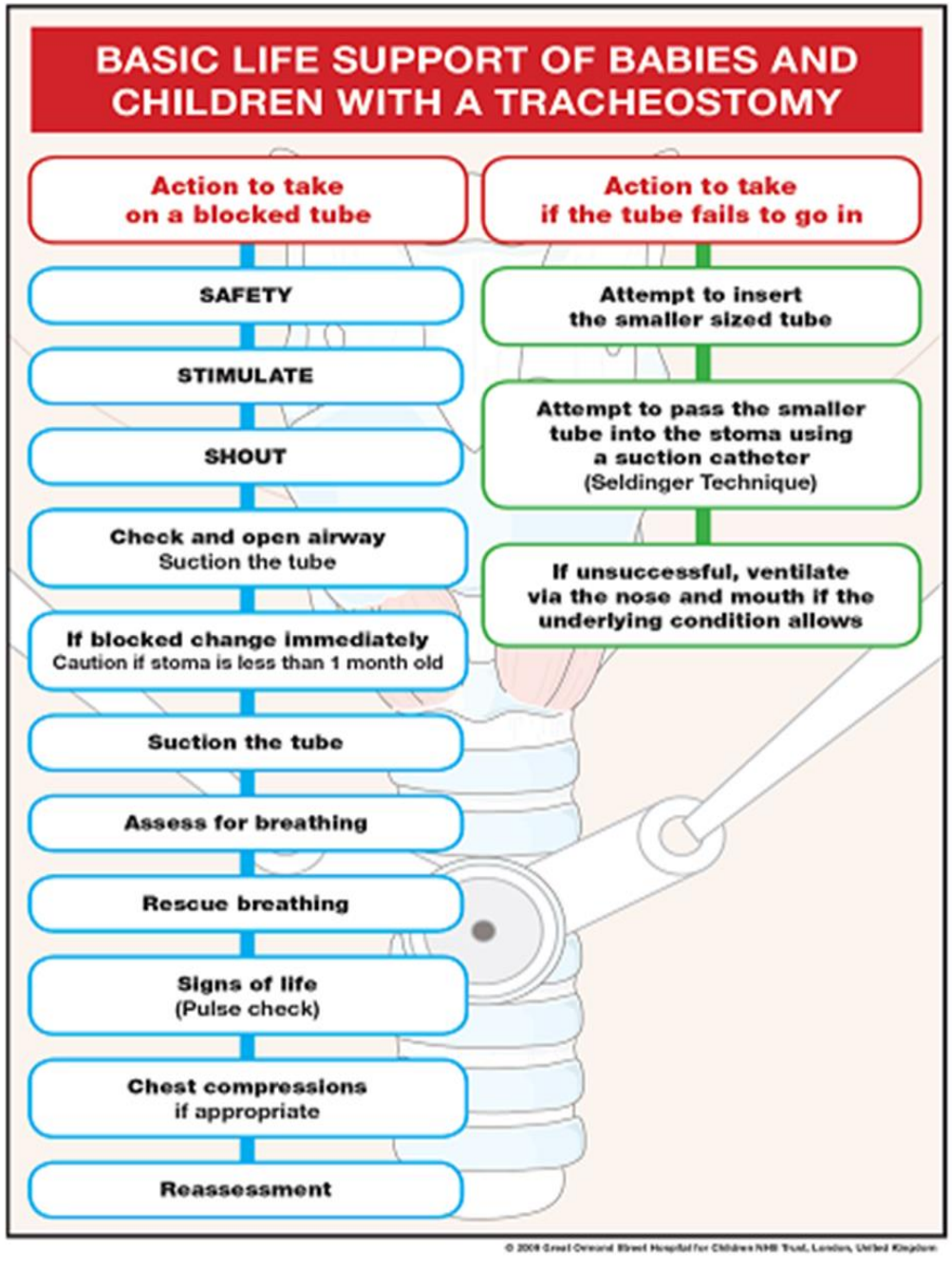
In an Emergency: Call 2222 and request the Resuscitation Team and ENT surgeon
Follow the Emergency Paediatric Tracheostomy Management Algorithm on reverse

Appendix Eight.



www.tracheostomy.org.uk/NTSP-Algorithms-and-Bedheads

Appendix Nine.



This patient has a

TRACHEOSTOMY with NO UPPER AIRWAY

Patient ID:

Amended Resuscitation:

Correct contents in Emergency Tracheostomy box & LMA at bedside.

- Follow the paediatric tracheostomy management algorithm first.
- Suction/change tube.
- If difficult to insert the tube – try smaller tube. If fails attempt seldinger technique.
- If this fails place small bag face mask or LMA over stoma and ventilate.

In an Emergency: Call 2222 and request the Resuscitation Team and ENT surgeon. Follow the Emergency Paediatric Tracheostomy Management Algorithm.

Appendix Eleven.

This is to be used in addition to a previously completed competency for a specific CYP where a carer can complete the below for a different CYP complimenting previous tracheostomy competency.

PPLLTV
Paediatric Pan London Long Term Ventilation

CYP Specific Tracheostomy Competency Completion Record

This competency pertains to:
Name of CYP:……

The completion of this training is in addition to previously completed tracheostomy training, of which, a record has been produced by NAME OF CARER and verified by NAME OF HEALTH PROFESSIONAL

This training had included (please tick all that apply):

Demonstration of knowledge of cares specific to the CYP tracheostomy tube PLEASE STATE

Successful replacement of the tracheostomy tube

Demonstration and knowledge of CYP specific emergency escalation management

I certify that (name of assessor) …… has reviewed the enclosed competency document and all of the competencies have been achieved to the required level and assessed by an experienced member of staff. Each assessor is competent to conduct and assess training in tracheostomy care.

Print full name…… Role…… Signature…… Date……

I certify that I (name of caregiver)…… have undergone a period of theory and practical training and I am confident and competent in the skills detailed in this booklet. I will only use this training in respect to the CYP named on the front of the booklet and I will not carry out any procedures that have not been covered by this training. I will continue to update my knowledge and seek advice from appropriate individuals if I require further training

Print full name…… Role…… Signature…… Date……