Tracheostomy Competency Framework

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Royal College of Speech and Language Therapists Tracheostomy Competency Framework

Contents

Section 1 Introduction

The core competencies below reflect guiding principles in tracheostomy care to guide safe and best practice.

We have not repeated the core competencies in each specialist section. Please refer to the core tracheostomy competencies in conjunction with the specialist sections.

All the core competencies and skills will need to be tailor made in relation to your job description, client group and setting. This may include appropriate terminology for your client group. In the competencies below we have used the term *'where indicated'* to prompt you in this respect.

Where possible we have tried to group the contents but the groupings are not exhaustive.

You will need a tracheostomy mentor to guide you through this competency process. Depending on resources, this may be someone outside of your existing team. You may need to use local networks to identity a suitable person. For the competencies relating to communication, swallowing and SLT professional skills the tracheostomy mentor must be another Speech and Language Therapist working with patients with tracheostomies. For the more generic tracheostomy competencies the mentor may be another multidisciplinary team (MDT) member e.g. clinical nurse specialise or physiotherapist.

SLT suctioning is not covered within the scope of this document.

Pre-requisite core skills

Independent in the management of dysphagia and communication in non-tracheostomised patients within the same setting and client group as the tracheostomised patients.

Section 2 Core tracheostomy skills

Theoretical tracheostomy knowledge
Examples of methods of theoretical knowledge acquisition:
- Reading books, journals and trache company literature/websites (refer to reading list at end of this document)
- Discussion with reps/nurses/physios, anaesthetists, etc.
- Attendance at courses e.g. basic tracheostomy day
- Tutorial with tracheostomy mentor
- Reading local protocols
- Observing colleagues in MDT
- Case scenarios
- Visits to other hospitals
- External supervision
- Invite trainers to your department
- Reflective log

Theoretical knowledge required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
Anatomical/physiological				
1. Anatomical and physiological changes when a tracheostomy is *in situ*				
2. Physiological changes when tracheostomy tube is manipulated				
3. Impact of tracheostomy on voice production and airway				
4. Relevant literature regarding impact of tracheostomy tubes on speech and swallowing				
Rationale, method				
5. Reasons for requirement of tracheostomy tube				

Theoretical knowledge required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
6. Different methods for tracheostomy insertion and their risks and benefits				
7. Risks and benefits of tracheostomy				
Complications, impact				
8. Complications of tracheostomy (long and short term)				
9. Awareness of complications and impact of previous/ongoing airway management e.g. ventilation and intubation				
10. Knowledge of the signs of respiratory distress				
11. Identify potential emergency situations and how to respond appropriately				
12. Impact of tracheostomy on psychosocial functioning of patient e.g. on family and relationships, body image, community support, education, etc.				
Equipment				
13. Understand and describe a range of different tube types, from tubes used in standard practice to more specialised tubes, their function, rationale for use and contraindications				
14. Label accessories e.g. speaking valve/one way valve/HME/cap etc.				
15. Essential bedside equipment as per local policy				

Theoretical knowledge required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
Swallowing assessment				
16. Current literature on modified Evans dye testing and its limitations for aspiration detection				
17. Indications for oral and tracheal suctioning				
18. Understands the limitations of a clinical swallowing assessment in the presence of an inflated cuff				
19. Awareness of use and timing of different instrumental tools (e.g. Fibreoptic Endoscopic Evaluation of Swallowing (FEES), Videofluoroscopy (VFS) to assess laryngeal integrity for phonation, secretion management and swallow function				
20. Limitations of cervical auscultation (especially in cuff inflated patients)				
21. Knowledge of the value and limitations of pulse oximetry in tracheostomy management/swallowing assessment				
Cuff deflation, communication, speaking valves				
22. Cuff deflation - complications, safety and timing, impact on respiration function, secretion management and swallowing				
23. Impact of speaking valve/one-way valve on physiology of speech,				

Theoretical knowledge required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
swallow, respiratory workload				
24. Different types of speaking valves/one way valves, their function, limitations and impact on weaning				
25. Indications and contraindications for speaking valve/one-way valve use				
26. Understands the circumstances for feeding with an inflated cuff and SLT role in this, i.e. palliative/quality of life/patient choice				
Weaning				
27. Process and timing of weaning and decannulation including indications/contraindications				
28. Knowledge of medications and their impact on tracheostomy weaning				
29. Awareness of relevant patient co-morbidities and their potential impact on weaning				
30. The role of different tracheostomy tubes (e.g. fenestrated tubes) in the weaning process				
Roles and policies				
31. Role of SLT in tracheostomy management in specific setting				
32. Roles of other MDT members				
33. Knowledge of the implications of ear, nose and throat (ENT) findings on phonation, swallowing and weaning and likely interventions				

Theoretical knowledge required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
34. Awareness of outcomes measures related to tracheostomy management				
35. Local tracheostomy policies and national guidelines				
36. Local infection control policy pertaining to tracheostomies e.g. personal protective equipment, visors				

Core practical tracheostomy skills:

Examples of methods for practical skill acquisition
- Practice on models (Trache Tom)
- Observe on ward rounds/school visit/community clinic
- Carry out with patients

Note: There is no assumption made about the numbers of patients you have to see to achieve these competencies; this should be decided with your tracheostomy mentor in accordance with your needs, job requirements and clinical setting.

Skills required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
Rationale, method				
1. Identify reason from case history for tracheostomy insertion				
Complications, impact				
2. Recognises signs of respiratory distress and manages appropriately				
3. Recognises signs of cuff leak in an inflated cuff				

Skills required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
4. Able to describe impact of tracheostomy on communication and swallowing to patient and carers				
Equipment				
5. Identify type, size and cuff status of tracheostomy				
6. Able to remove, clean and reinsert inner tube according to local policy				
7. Able to use equipment e.g. cuff pressure manometer, pulse oximeter				
8. Able to give relevant information to patients about the tracheostomy tube				
9. Able to advise the MDT on selection of tubes				
Swallowing assessment				
10. Able to recognise aspiration signs in relation to a tracheostomy tube, e.g. identifying food/fluid stained secretions from trache on suctioning or stoma				
11. Able to recognise signs of aspiration around an inflated tracheostomy cuff				
12. Able to use blue dye as an adjunct to clinical bedside assessment of swallowing, acknowledging the significant limitations of the test				
13. Able to document clearly all aspects of tracheostomy assessment and management				

Skills required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
14. Provide dysphagia, communication and therapy recommendations appropriate to tracheostomised patients in the particular care setting				
Cuff deflation, communication, speaking valves				
15. Able to deflate cuff with simultaneous suction by an appropriately trained member of MDT				
16. Able to advise cuff deflation protocol as part of MDT				
17. Able to advise patient/family/MDT re effects of cuff deflation on voice and swallowing				
18. Able to finger occlude to assess voice				
19. Able to place speaking valve/one-way valve, and remove safely and appropriately				
20. Able to assess speaking valve/one-way valve tolerance, voice quality and trouble shoot any difficulties				
21. Able to re-inflate cuff and ensure that cuff pressure is checked in accordance with local policy				
Weaning				
22. Able to contribute SLT findings and their implications to team re: tracheostomy weaning and decannulation				
23. Able to adapt tracheostomy weaning advice according to plans for				

Skills required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
surgical/theatre interventions				
Training others				
24. Educates other MDT/family members and patient about the impact of tracheostomy on communication and swallowing and the appropriate use of one-way/speaking valve and Heat Moisture Exchange devices (HMEs)				
25. Able to advise on speaking valve/one way valve protocol as part of MDT and train other professionals as necessary				

Section 3 Attainment of competency

Once you have demonstrated these skills in theory, you need to demonstrate competency in the generalisation of knowledge, skills and decision making in relation to specific patient's assessments in your setting.

This can be done in a number of ways, but a suggested framework is as follows:

Practical application of knowledge

	Evidence	**Signature and date**
Observation, shadowing	Observe sessions and complete reflective log	
Take detailed case history	Completion of case history	
Assessment and management with assistance in decision making	Assessor to observe	
Decision making independently	Assessor to observe sessions	
Tracheostomy-related problem solving	Self appraisal Evidence of liaison in case notes Rarely requiring a second opinion	
Multiple tracheostomised patients on caseload	Same as above	
Training and presentation	Case presentation to rest of team	

Section 4 Maintenance of competencies

As per the whole of this document, there is no assumption made about the numbers of patients you need to see during a defined time period in order to maintain these competencies; this again should be decided with your tracheostomy mentor in accordance with your job requirements and clinical setting. Individual SLTs are responsible for maintaining their competency in this field through a commitment to CPD.

Section 5 Critical care tracheostomy competencies

Theoretical knowledge required	Method of Acquisition	Evidence of Achievement	KSF Level	Date and Sign
1 1.Knowledge of the different types and modes of ventilation, their benefits and complications				
2 Ability to understand the appropriacy of downsizing a tracheostomy tube or not i.e. to facilitate leak around tube vs. pt receiving adequate ventilation				
3 Understands when Passy Muir Valve (PMV) can be considered in patients who are ventilated				
4 Understands how a ventilator can be manipulated to optimise speech or to trouble-shoot non tolerance of PMV and to hypothesise causes				
5 Knowledge of relevant critical care roles and policies				
Skills Required	**Method of Acquisition**	**Evidence of Achievement**	**KSF Level**	**Date and Sign**
1 Identifies the current method and amount of ventilation and the ventilatory weaning status				
2 Able to recognise when assessment of a critical care patient is not indicated				
3 Able to recognise ventilator disconnection or failure alarms				
4 Demonstrates ability to place a				

	(PMV) in line with ventilator circuit, using the appropriate equipment				
5	Able to liaise closely with ICU team and communicate swallowing communication management plans clearly				
6	Influences local ICU tracheostomy policy				

Section 6 Head and neck competencies

These competencies only refer to head and neck knowledge with regard to tracheostomy management and do not encompass the competencies required for a whole head and neck caseload.

Theoretical knowledge required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
1. Understands the anatomical and functional changes between tracheostomy and laryngectomy (permanent stoma) patients				
2. Understands clinical requirement for tracheostomy, disease process, treatment intention (i.e. curative versus palliative) and predicted treatment trajectory				

Skills required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
1. Facilitates communication for laryngectomy patients with a tracheostomy tube *in situ*				
2. Able to differentially diagnose causes of dys/aphonia on phonation attempts with tracheostomy following surgery/radiotherapy, and proactively problem solve cause, considering appropriacy of decannulation attempts				
3. Knowledge of the appropriate use of tracheostomy tubes in complex laryngectomy/pharyngolaryngectomy in acute management during the healing process				
4. Awareness of scope of practice and when changing inner tube/deflating cuff is not appropriate due to disease process and bleeding risk				
5. Knowledge of local cancer network with reference to tracheostomy pathway for patients				
7. Form links with local cancer networks				

Section 7 Paediatric competencies

These competencies only refer to paediatric knowledge with regard to tracheostomy management and do not encompass the whole range of competencies required for working with a whole paediatric caseload.

Theoretical knowledge required	Method of Acquisition	Evidence of Achievement	KSF Level	Date and sign
1. Impact of developing anatomy and physiology in neonate/infant/child/adolescent				
2. Complications associated with long-term tracheostomy e.g. suprastomal collapse, granulation tissue				
3. Knowledge of current literature on the impact of long-term tracheostomy on communication development (including phonation)				
4. Knowledge of different modes of ventilation, benefits and complications				
5. Understands when PMV can be considered in patients who are ventilated				
6. Able to understand when downsizing a tracheostomy tube would be appropriate and when it would not i.e. to facilitate leak around tube vs. when patient needs to receive adequate ventilation				
7. Implications of changing airway pathology and impact on feeding and communication				
8. Role of extended MDT in community tracheostomy management and community support services e.g. respite				

care, educational staff				
9 . For paediatric head and neck caseload, understands the impact of treatment e.g. surgery, radiotherapy, on the timing and need for tracheostomy +/- risk of further treatment if that necessitates keeping the trache *in situ*				
10. Knowledge of health and safety implications of working with children with a tracheostomy in the community e.g. lone working, emergency procedures				
11. Awareness of children's potential behavioural response to having a tracheostomy and associated equipment				
12. Knowledge of tracheostomy support services e.g. Aid for Children with tracheostomies (ACT)				
Skills required	**Method of acquisition**	**Evidence of achievement**	**KSF level**	**Date and sign**
1. Identifies the current type and amount of ventilation and the patients ventilatory weaning status				
2. Demonstrates ability to place a PMV in line with ventilator circuit, using the appropriate equipment				
3. Recognises potential for change in terms of child development and medical management in patients with long-term tracheostomy and appropriacy of timing of review				
4. Recognises the importance of MDT working in tracheostomy management and liaises with colleagues appropriately				

Section 8 Burns tracheostomy competencies

These competencies only refer to burns knowledge with regard to tracheostomy management and do not encompass the whole range of competencies required for working with a whole burns caseload.

Knowledge required	Methods of acquisition	Evidence of achievement	KSF level	Date and sign
1. Knowledge of the risks of laryngeal trauma due to inhalation injury and subsequent impact on tracheostomy weaning, voice and swallowing				
2. Understands the effect of neck burns on the method of tracheostomy tube insertion, type of tube, stoma healing				
3. Understands the risks of dysphagia and patterns of recovery in burns patients e.g. delays to achieving oral feeding associated with tracheostomy/ventilation and facial burns				
4. Understands the effects of extent and type of burn injury on intubation and tracheostomy /ventilation requirements and swallowing				
5. Understands the effects of frequent theatre interventions on interruptions to tracheostomy weaning process or need for re-intubation for surgical debridement and skin grafting				

Practical skills required

Skills required	Method of acquisition	Evidence of achievement	KSF level	Date and sign
1.Takes case history including presence of inhalation injury and intubation, extent/type of burn, tracheostomy/ventilation status				
2. Adapts swallowing and communications assessment to consider effects of neck burns on tracheostomy weaning (e.g. stoma leak, infection) and on ability to palpate swallow (e.g. dressings, pain) and detect aspiration				
3. Identifies bedside clinical signs of inhalation injury (e.g. dysphonia) following tracheostomy cuff deflation, speaking valve use or decannulation and refers appropriately to ENT				
4.Recognises laryngeal trauma due to inhalation injury on bedside swallowing assessment, refers for FEES and advises on impact on tracheostomy weaning				

Section 9 Community and/or long-term tracheostomy competencies

These competencies only refer to community/long-term knowledge with regard to tracheostomy management and do not encompass the range of competencies required for working with a whole community/long-term caseload.

Theoretical knowledge required	**Methods of acquisition**	**Evidence of achievement**	**KSF level**	**Date and sign**
1. Understands complications associated with long-term tracheostomy				
2. Understands the role of the extended MDT in community tracheostomy management				
3. Knowledge of the local support available to patients in their own homes, nursing homes, rehab centres and children's centres				
4. Knowledge of local tracheostomy management protocols				
5. Knowledge of national/manufacturers tracheostomy equipment guidelines e.g. frequency of changes and required equipment within the home, nursing home or educational setting				
Skills required	**Methods of acquisition**	**Evidence of achievement**	**KSF level**	**Date and sign**
1. Recognises inconsistencies in equipment use or tracheostomy care and alerts relevant professional with any concerns				

2. Recognises the importance of MDT working in community tracheostomy management and liaises with colleagues appropriately				
3. Recognises potential for change in patients with long-term tracheostomy and works with the MDT to facilitate weaning				

Section 10 References/reading lists

The following books and articles may guide your understanding of working with tracheostomy patients.

General

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