The New Zealand Speech-language Therapists' Association (NZSTA)

# Competency Framework:

# Tracheostomy Management

# Acknowledgements

**Authors**
Anna Miles – The University of Auckland, Expert Advisor to the NZSTA- Adult Dysphagia
Annabelle Hastings – Waikato District Health Board
Aoife O'Reilly – Capital Coast District Health Board
Kelly Davis – Counties Manukau District Health Board
Laura Fuller – Counties Manukau District Health Board
Louise Bax – Auckland District Health Board
Naomi McLellan – Auckland District Health Board
Rebecca Lantzos – Counties Manukau District Health Board, Expert Advisor to the NZSTA- Head & Neck

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**Approval and Advisors**
The New Zealand Speech-language Therapists' Association Executive Council
The New Zealand Speech-language Therapists' Health Leaders Forum
Dame Rangimārie Naida Glavish, from the Ngāti Whātua iwi, chief advisor Tikanga for Auckland and Waitemata DHB

# Background

It is the position of the NZSTA that tracheostomy management is within the scope of practice for Speech-language Therapists (SLTs). Tracheostomy management should only be carried out by SLTs specifically trained to do so. It therefore requires a competency framework to provide support to trainers and to ensure SLTs are appropriately trained.

This competency framework should be interpreted with the unique New Zealand (NZ) context in mind. As health professionals working in New Zealand and members of the NZSTA, we are committed to upholding Te Tiriti o Waitangi and to reducing health inequities. Clinicians utilising this resource should ensure their practices are culturally safe and demonstrate the importance of holistic views of health and wellbeing that include physical, mental, social and spiritual elements, especially with persons who identify as Māori.

This framework should be utilised and enacted in line with NZSTA-endorsed Tracheostomy Practice Guideline (Speech Pathology Australia, 2021), which includes SLT scope of practice.

## Aim

This framework has been developed by the NZSTA to guide and support SLTs working with people with a tracheostomy within the New Zealand context, whilst advocating for the highest standards of patient care.

## Philosophy of framework

The NZSTA is committed to ensuring the highest level of professional standards are set in regards to obtaining and maintaining tracheostomy management competencies.

The NZSTA strongly advocates that tracheostomy management competency completion at all levels should be based on demonstration of skill rather than completion of a set number of procedures.

The NZSTA supports tracheostomy management training as early as is reasonably appropriate in an SLT's professional career.

The NZSTA recognises that different skill-sets are required in order to deliver effective tracheostomy management in different clinical areas, and have therefore endeavoured to develop a competency document suitable to different patient populations.

The NZSTA recognises the challenges faced by different services across NZ in implementing and maintaining tracheostomy management services. This competency framework has been designed to suit the national context.

The NZSTA recognises that a specific skill-set is required in order to effectively train others to be competent in tracheostomy management.

The NZSTA recognises the frequent movement of SLTs into NZ from overseas. All SLTs trained in tracheostomy management overseas must submit portfolio evidence of training and clinical practice to their line manager*. The line manager will provide the Speech-language Therapist (SLT) with an NZSTA tracheostomy management Level grade based on the NZSTA Competency Framework (with support from Level 4/5 tracheostomy competent clinicians where requested). This may include a virtual supervision session and/or viewing of reports and clinical notes, and/or live audit of practice.

**In the context of this document, in order to reflect variations in local NZ health services, the term 'line manager' is used to describe an SLT's operational or clinical/professional senior/leader.*

## Cultural competency

Consultation in regards to working with people who identify as Māori and have a tracheostomy tube was sought from Dame Rangimārie Naida Glavish, from the Ngāti Whātua iwi, chief advisor Tikanga for Auckland and Waitematā DHB.

**Whakawhitiwhitinga korero:** when a person is unwell, they may revert to using their first language of te reo Māori and it is important to offer translation and opportunity to use te reo Māori in consultations. Māori may communicate more with their eyes and we should pay close attention to non verbal communication and utilise all senses, such as smell, hearing and touch. We should avoid the use of bland language and instead offer words of encouragement, paying close attention to our tone of voice. It may be helpful for people to be asked to 'breathe in and breathe out' to create a calm environment.

**Whānau:** Whānau are integral to the assessment and treatment of Māori and should always be involved a person's care. People may feel ashamed and frustrated with their trauma, and involvement of whānau may reduce the shame factor as they are able to understand the person's unique perspective and sense of self-worth.

**Tikanga:** it is important to be aware of and practise tikanga. We need to consider this in an open and considered way. Some people may wish to say karakia before kai and others may not wish to do so. It is important to always ask permission. In regards to saliva, this can be considered a 'life force' for Māori and it is important to offer a means of collecting this if the person would like, either to keep or to dispose of themselves in private.

We thank Dame Naida for sharing her insights and time.

# Contents

# 1. Tracheostomy competency introduction

## 1.1 Prerequisites for tracheostomy management training

- NZSTA Full Membership, including locally defined entry level dysphagia and communication competency for Level 2 tracheostomy competency onwards
- Independence in the management of dysphagia and communication in non-tracheostomised patients within the same setting and patient cohort as the tracheostomised patients
- First aid/resuscitation training as per SLT local policy, including knowledge of cardiopulmonary resuscitation for neck breathers
- Formal support from line manager and clinical leader (where different) to commence training
- Availability of clinical supervision/coaching from a supervisor with appropriate tracheostomy competency

Local policies may apply specific pre-requisites for tracheostomy training which are relevant to their specific workplace.

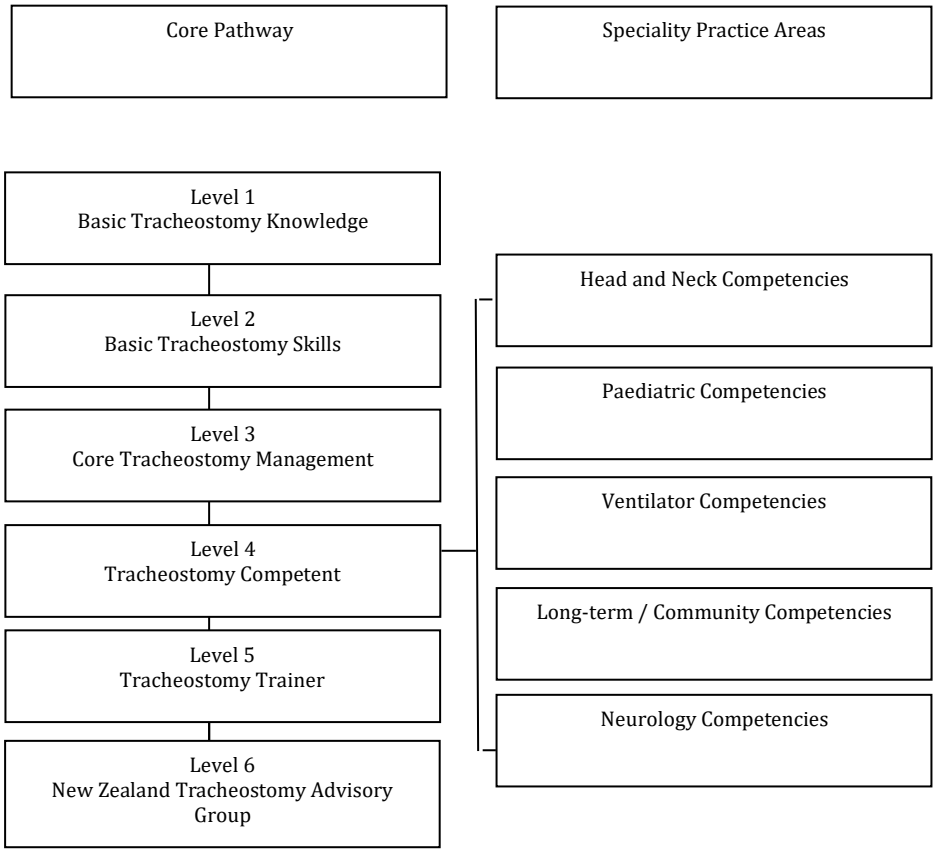
Where developing tracheostomy competencies in a new clinical area, the SLT must ensure that they are upskilling in all knowledge and skills within that setting.

Alongside this competency framework, the SLT is expected to engage in active lifelong learning. This is to ensure that emerging research is incorporated into practice as appropriate.

## 1.2 Tracheostomy competency pathway

The NZSTA provides a pathway, from level one to six, for an SLT to follow in order to train in tracheostomy management. Level four is split into several speciality practice areas. It is not expected that an SLT would complete competencies in all speciality practice areas. It may be appropriate to gain competency in a speciality practice area at the same time as core tracheostomy management competencies. This will depend on an SLT's area of work and is at the discretion of the line manager +/- supervising SLT.

An SLT's Level 5 supervisor may not always be competent in the speciality practice area in which the SLT is training. In this case, the trainee should seek additional support from an external SLT who is competent in the speciality practice area and/or support from an appropriate local multidisciplinary team member.




## 1.3 Competency progression

### 1.3.1 General principles

- Responsibility for sign off for SLTs at each competency level lies with the local line manager, and appropriately trained clinician depending on level of sign off (see Tables in Section 1.5). These may or may not be the same person.

- Where a line manager is not competent in tracheostomy management, they are required to seek internal or external Level 5 or Level 6 support to ascertain competency for Level 2 onwards

- The competency levels have been divided into three categories:
    - Knowledge (things you need to know)
    - Skill (things you need to know how to do)
    - Competency (how you apply your knowledge and skills within your designated scope of practice)

- The timeframe taken to achieve competency at each level may vary greatly, depending on the amount of opportunities available. It is not unusual to take a minimum of 12 months to achieve any level or a speciality practice area.

- For some SLTs, their job description, service needs and/or access to tracheostomy management experiences may never be sufficient to allow progression beyond Level 2 or Level 3

- E-portfolios are a NZSTA standard expectation for tracheostomy trained SLTs. E-portfolios should provide evidence of practice at the level being assessed and should include: logs of interventions completed as appropriate; reflections on complex patients; reflections on occasions where tracheostomy weaning is more complex and needs more in-depth multi-disciplinary discussion; evidence of problem solving; and completed local procedural documentation. For Levels 1-3, comprehensive logs/reflections are expected. From Level 4 onwards, lists of patients/supervisee observations may be kept, with reflections on complex management/challenges.

- Opportunities such as web-based special interest groups should be explored to enhance on-going competency and increase exposure to peer support and learning

1.3.2 Competency levels

- Basic Tracheostomy Knowledge (Level 1) can be successfully completed before or concurrently with Basic Tracheostomy Skills (Level 2)

- In order to meet the requirements of Core Tracheostomy Management (Level 3), Levels 1 and 2 must have been completed

- Once Level 2 and Level 3 have been achieved, there is an expectation that a period of consolidation will be required before moving through each of the following levels. The consolidation timeframe should be determined at the discretion of the line manager or supervising SLT. It will depend on the frequency and complexity of tracheostomy procedures completed by the trainee

- Once Level 3 has been achieved, a trainee can progress to Level 4. To do this, they will require supervision of the completion of complex tracheostomy management with a Level 4 or Level 5 SLT

- It is acknowledged that perceived complexity is subjective and can be guided by the SLT's own level of experience or the environment within which the SLT is operating (e.g. with limited multi-disciplinary team support). The following is a

list of factors which is not exhaustive but may be considered within the definition of complex:

- Multiple co-morbidities
- Complex social situation
- Anatomical deficits such as airway patency concerns, granulation tissue, airway stenosis, or tracheomalacia
- Complex head and neck surgical reconstruction

- It is understood that there will be occasions where patients who are not considered complex from the history may become complex during the intervention. In accordance with the NZSTA SLT code of ethics, "*Members shall recognise the limits of their professional competence".* In these cases the intervention should be completed while the Level 3 clinician feels it is safe to do so and abandoned where it is beyond their skill level.

- To progress to Level 4 without a local Tracheostomy Trainer (Level 5), support for distance supervision can provide opportunities to progress. This may include review of live or recorded sessions and use of local multidisciplinary colleagues to supervise complex tracheostomy management. It is an expectation that where there is no local Tracheostomy Trainer, the line manager is required to seek this external expertise and sign off before providing local sign off.

- Once Level 4 competency has been achieved, in order for a staff member to develop Level 5 competencies (where deemed appropriate by clinical manager), they will require supervision of their tracheostomy management training provision by another Level 5 or a Level 6 clinician. It is recognised that not all training sessions will be supervised. Supervision of different aspects of tracheostomy training is a requirement for sign off. It is possible to do this remotely using live video sessions and video footage with reflections.

## 1.4 Acquisition of knowledge, skills and competency

Theoretical knowledge pertaining to tracheostomy competency can be achieved via self-directed learning. This includes the NZSTA endorsed simulation workshop, the NZSTA-approved Tracheostomy SIG, workshops, study days, webinars and independent reading.Direct observation and supervision is required beyond Level 1. Application of theoretical knowledge must be demonstrated and observed by the supervisor in order to satisfy the competency requirements. This can be either face-to-face (e.g. clinical audit) or through the NZSTA continuous professional development log or equivalent e-portfolio.

Training in tracheostomy management should be conducted with an appropriate degree of frequency in order to allow for consolidation of learning.

Level 5 and Level 6 SLTs are expected to support one other through annual peer supervision and case-based discussions. This is to ensure maintenance and enhancement of own competency and equity of Level 1-4 sign-off for trainees.

It is the responsibility of the National Tracheostomy Advisory Group (Level 6) to provide or contribute to at least one annual professional development or peer supervision opportunity for Level 5 and 6 SLTs.

## 1.5 Tracheostomy competency overview

These tables provide a summary of each competency levels including; scope, supervision and sign off required.

| Competency | Competency abbreviation | Pre-requisites | Summary of skills on completion | Supervision and sign-off required for competency completion | Within scope of practice on completion | Outside scope of practice on completion |
|---|---|---|---|---|---|---|
| Basic Tracheostomy Knowledge | Level 1 | See section 2.2 | ● Understand the SLT's professional role in tracheostomy management<br><br>● Identify tracheostomy tube types and accessories, including indications and contraindications<br><br>● Describe the anatomical and physiological changes to the airway, communication, and swallowing with a tracheostomy tube in situ<br><br>● Describe the swallowing and communication assessment and management process for tracheostomised patients, including limitations and adaptations of commonly used assessment tools<br><br>● Knowledge of NZSTA Tracheostomy Standards of Practice and Competency Framework and local tracheostomy policies | Level 3+ SLT<br><br>Local line manager/clinical approval | Observation only | Hands on tracheostomy care<br><br>MDT education |

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| | | | ● Awareness of emergency management processes, including emergency calls, CPR credentialing where available/appropriate | | | |

| Competency | Competency abbreviation | Pre-requisites | Summary of skills on completion | Supervision and sign-off required for competency completion | Within scope of practice on completion | Outside scope of practice on completion |
|---|---|---|---|---|---|---|
| Basic Tracheostomy Skills | Level 2 | Completion of Level 1 or concurrent with Level 1 | *In addition to Level 1:*<br><br>● Able to apply basic tracheostomy knowledge to practice<br>● Able to carry out core practical skills | E-portfolio to satisfaction of Level 4+ SLT<br><br>Peer review on request by Level 4+ SLT | Observation with MDT and Level 3+ SLT<br><br>Perform specific delegated tasks under direct supervision | To undertake clinical decision making regarding person with a tracheostomy<br><br>Unsupervised practice<br><br>MDT education |

| Competency | Competency abbreviation | Pre-requisites | Summary of skills on completion | Supervision and sign-off required for competency completion | Within scope of practice on completion | Outside scope of practice on completion |
|---|---|---|---|---|---|---|
| Core Tracheostomy Management | Level 3 | Completion of Level 1 & 2 | *In addition to Level 1 & 2:*<br><br>● Able to reflect and discuss any potential issues<br>● Able to provide tailored and specialist advice<br>● Able to independently manage an agreed intervention | Sign off Level 5+ SLT<br><br>MDT and Level 4+ SLT with appropriate supervision for practice<br><br>Local line manager/clinical leader sign off | Able to manage a patient with tracheostomy with supervision within negotiated scope, either direct or indirect, dependent on current level of competency and case complexity<br><br>Clinical decision making oversight by a Level 4+ SLT required | Unsupervised practice<br><br>Training<br><br>MDT Education |

| Competency | Competency abbreviation | Pre requisites | Summary of skills on completion | Supervision and sign-off required for competency completion | Within scope of practice on completion | Outside scope of practice on completion |
|---|---|---|---|---|---|---|
| Tracheostomy Competent | Level 4 | Completion of Levels 1-3 | *In addition to Levels 1, 2 & 3:*<br><br>● Able to independently assess and manage communication and swallowing disorders in tracheostomy cases broadly and within speciality practice areas<br>● Able to contribute to, and where appropriate to lead, MDT tracheostomy weaning cases within speciality areas<br>● Demonstrates appropriate leadership within MDT sessions and management plans (within speciality practice area/s), including co-support of out-of-discipline team members i.e. physiotherapist, nurse<br><br>*There is an expectation that a period of consolidation will be required before moving from Level 3 to Level 4. This is likely to be at least 6 months, depending on access and frequency of cases.* | E-portfolio to satisfaction of Level 5+ SLT<br><br>Peer review to satisfaction of Level 5+ SLT<br><br>Sign-off by Level 5+ SLT and local clinical manager/clinical leader | Undertake independent tracheostomy management with all patients within scope of current level of competency<br><br>Providing supervision and sign off for Levels 1 & 2<br><br>MDT Education<br><br>Local quality initiatives | Being responsible for primary supervision and sign off for Level 3+ |

| Competency | Competency abbreviation | Pre requisites | Summary of skills on completion | Supervision and sign-off required for competency completion | Within scope of practice on completion | Outside scope of practice on completion |
|---|---|---|---|---|---|---|
| Tracheostomy Trainer | Level 5 | Completion of Level 1-4 | *In addition to Levels 1, 2, 3 & 4:*<br><br>● Knowledge and understanding of varied adult learning principles<br><br>● Experience in other clinical coaching and on-the-job training<br><br>● Supporting trainees in challenges of differences in team practices | E-portfolio and supervision session/s to satisfaction of another Level 5+ SLT<br><br>Dual sign off from local line manager/clinical leader and Level 5 SLT (this can be the same person where applicable) | Undertake independent tracheostomy management<br><br>Providing supervision and sign off for Levels 1-4<br><br>Provision of supervision and sign of for Level 5 (in conjunction with local clinical manager where different)<br><br>MDT Education<br><br>Local quality initiatives<br><br>Contributions to national SIG | |

** if you already hold a NZSTA Level 5 trainer competency in another field of practice, aspects of competency may be cross-credited but sign off of additional evidence of tracheostomy-specific mentoring is required*

| Competency | Competency abbreviation | Pre requisites | ● Summary of skills on completion | Supervision and sign-off required for competency completion | Within scope of practice on completion | Outside scope of practice on completion |
|---|---|---|---|---|---|---|
| National Tracheostomy Advisory Group | Level 6 | Completion of Level 5 | *In addition to Levels 1, 2, 3, 4 & 5, two or more of below:*<br><br>● Extensive knowledge or participation in tracheostomy research<br><br>● National/international level presentation/teaching pertinent to tracheostomy<br><br>● Nomination by two other Level 6 clinicians to attest to the level of tracheostomy -specific skills<br><br>● Active contribution to national tracheostomy support/SIG-based learning activities | Nominated by National SLT Health Leaders Group | Undertake independent tracheostomy management<br><br>Providing supervision and sign off for Levels 1-5<br><br>MDT Education<br><br>Local quality initiatives<br><br>Contributions to national initiatives | |

## 1.6 Maintenance of competency

It is the responsibility of the SLT trained in tracheostomy management to maintain clinical competency. They must ensure up-to-date knowledge of clinical development relating to tracheostomy management and engage in tracheostomy-specific clinical supervision. This includes annual peer review (see e-portfolio requirements above).

Following a significant lapse in tracheostomy practice, a return to practice process should be completed. This may include a clinical audit by a Level 4+ SLT, using a locally agreed audit/peer review process or appropriate support sought from a Level 5+ SLT. Formal supervision relevant to updates in evidence-based practice and any changes in local policy should also take place prior to re-commencing tracheostomy practice.

Note: Following a three year lapse in practice, NZSTA standard return-to-practice requirements apply.

## 1.7 Grand-parenting of tracheostomy competency

If an SLT was trained in tracheostomy management overseas or was trained prior to 2021, it is their responsibility to provide adequate evidence of their tracheostomy training, experience, supervision and competency. This may include signed international or local tracheostomy competency packages, evidence of e-learning certification or formal education, tracheostomy logs and reflections, references from managers, supervisors and previous mentees, or peer assessment. The Line Manager/Clinical Leader will determine the tracheostomy competency level for the staff member based on this evidence. Level 5 or Level 6 SLTs may need to be consulted where evidence is not clear. This may include a virtual supervision session and/or viewing of reports and clinical notes, and/or live audit of practice.

# 2 Tracheostomy competencies

## 2.1 Basic Tracheostomy Knowledge (Level 1)

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| **Anatomy and Physiology**<br>• Identifies the anatomical and physiological changes in the airway, and communication and swallowing process when a tracheostomy tube is in situ<br>• Identifies the relevant literature and research on the impact of tracheostomy tubes on communication and swallowing | | |
| **Tracheostomy Insertion**<br>• Identifies why a patient may require a tracheostomy tube<br>• Discusses risks and benefits of tracheostomy<br>• Identifies different methods of tracheostomy insertion and their risks and benefits<br>• Identifies complications of tracheostomy, both long and short term<br>• Identifies impact of a tracheostomy tube on activity, participation and psychosocial functioning for the patient and their whānau | | |
| **Respiration**<br>• Describes signs of respiratory distress<br>• Identifies setting-specific emergency procedures<br>• Describes purpose and methods of humidification | | |
| **Tracheostomy Accessories**<br>• Describes a range of tube types including standard and specialised tracheostomy tubes | | |

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| • Describes the function and rationale for use of different tubes, including contraindications<br>• Describes tracheostomy accessories and their purpose e.g. one-way valve, cap, HME<br>• Describes different types of one-way valves and the physiology of these on speech and swallowing<br>• Identifies indications and contraindications for one-way valve trial/use<br>• Describes items in emergency tracheostomy box and essential equipment as per local policy | | |
| **Swallowing**<br>• Discusses the current literature on the modified Evans blue dye test and its limitations in a swallowing assessment<br>• Describes the limitations of clinical swallowing evaluation and Cough Reflex Testing<br>• Identifies indications for oral and tracheal suctioning<br>• Describes impact of cuff status, one-way valve use and capping in swallowing assessment/oral trials<br>• Discusses the use and timing of instrumental assessment such as flexible endoscopic evaluation (FEES) and videofluoroscopic study of swallowing (VFSS) in patients with a tracheostomy, including the relative risks and benefits | | |
| **Communication**<br>• Demonstrates knowledge of verbal and non-verbal options to support communication in patients with a tracheostomy<br>• Describes impact of tracheostomy tube type, cuff status, and one-way valves on voice production | | |
| **Tracheostomy Weaning**<br>• Identifies the potential complications regarding cuff deflation, including the timing and safety of cuff deflation<br>• Discusses the impact of cuff deflation on respiratory function, secretion management, swallowing, and voice | | |

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| production<br>• Discusses the process and timing of weaning/decannulation including indications and contraindications<br>• Demonstrates understanding of the available approaches and steps to weaning<br>• Describes signs that the patient requires suctioning and can identify appropriate MDT support people | | |
| **Professional Issues**<br>• Identifies the role of SLT in tracheostomy management in specific clinical setting<br>• Demonstrates awareness of local level policy on the weaning process<br>• Identifies the role of other MDT members<br>• Identifies local infection control policies related to tracheostomy e.g. PPE, AGPs<br>• Demonstrates understanding of tracheostomy in the New Zealand context (e.g. local policy, governance, cultural safety) | | |

## 2.2 Basic Tracheostomy Skills (Level 2)

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| **Tracheostomy Tube**<br>• Identifies reason for tracheostomy tube insertion for each specific patient<br>• Identifies patient's tracheostomy tube type, size and cuff status<br>• Discusses the impact of tube type on assessment/management, alongside risks and benefits for voice/communication and swallowing including:<br>-cuff status<br>-size<br>-length<br>-subglottic suction port<br>-fenestrated/non fenestrated<br>-cap<br>-one way valve | | |
| **Basic Tracheostomy Care**<br>• Locates tracheostomy accessories in local facility, e.g. one way valve/HME/cap<br>• Checks essential bedside equipment as per local policy<br>• Performs oral suction with Yankeur and supports with oral hygiene practices<br>• Recognise signs of cuff leak in an inflated cuff<br>• Removes, cleans and reinserts the inner cannula according to local policy<br>• Recognises requirement for tracheal suction and seeks support from appropriate person(s)<br>• Aspirates the subglottic suction line if present | | |

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| • Deflates cuff with simultaneous suction by an appropriately trained member of the MDT and able to re-inflate cuff and check pressure (in accordance with local policy)<br>• Demonstrates digital occlusion appropriately<br>• Places and removes one-way valve, HME and/or cap | | |
| **Management Considerations**<br>• Locates relevant nursing charts/documentation/oxygen requirement/suction requirement and how it relates to management<br>• Recognises overall medical status and identifies the impact of this on management, including haemodynamic stability and respiratory status<br>• Clearly documents all aspects of tracheostomy assessment and management in line with local documentation standards | | |
| **Swallowing**<br>• Identifies and comments on potential dysphagia and impact on secretion management<br>• Recognises signs of aspiration in the patient with a tracheostomy, e.g. identifying food/fluid stained secretions from tracheostomy on suctioning or from stoma site<br>• Identifies indication for and timing for the use of different instrumental tools for a specific patient (e.g. FEES and VFSS), used to assess pharyngeal/laryngeal anatomy and physiology for the purpose of swallowing and secretion management<br>• Identifies when ENT referral is required for assessment of laryngeal pathology | | |
| **Communication**<br>• Identifies communication status/impairment<br>• Assesses communication and provides appropriate interventions, including augmentative and alternative communication (ACC) | | |

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| **Education**<br>• Describes the impact of tracheostomy on communication and swallowing, assessment findings, weaning and management recommendations to the patient, carers, whānau, and other health professionals | | |

## 2.3 Core Tracheostomy Management (Level 3)

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| **Tracheostomy Weaning**<br>• Contributes to weaning protocol as part of MDT<br>• Checks airway patency as part of assessment<br>• Assesses tolerance of digital occlusion, one-way valve and cap, including assessment of voice quality and impact on secretion management, and troubleshoot any arising issues<br>• Assesses patient tolerance of weaning protocol and suggests individualised care plans as part of MDT<br>• Identifies the need for and suggests a change in tube type/size with prompting<br>• Adapts tracheostomy weaning advice according to plans for surgical interventions | | |
| **Swallowing/Secretion Management**<br>• Uses the blue dye test as an adjunct to clinical bedside assessment of swallowing, acknowledging the significant limitations of the test, if there is no access to FEES or VFSS | | |
| **MDT Education**<br>• Provides education to MDT as necessary and within scope of SLT expertise | | |

## 2.4 Tracheostomy Competent (Level 4)

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| • Independently develops, communicates and carries out management plans for communication and swallowing for complex cases | | |
| • Develops, communicates and carry out management plans for weaning for complex cases, in conjunction with MDT as appropriate | | |
| • Independently identifies the need for input from wider MDT/external services and can coordinate these services as needed (e.g. respiratory, ORL, speciality nurses) | | |
| • Provides in-session cross-discipline support, as and where appropriate, (e.g. to a physiotherapist undergoing tracheostomy training) | | |
| • Demonstrates competency in own speciality practice area/s and supports peers as appropriate | | |
| • Demonstrates awareness of competency level and learning/support needs in areas outside of own speciality practice areas | | |
| • Uses peer networks and accesses senior support as appropriate | | |

## 2.5 Tracheostomy Trainer (Level 5)

It is an expectation that a period of consolidation of skills occurs prior to working towards training others in tracheostomy management. This period of time will vary according to many factors. Line manager/clinical leader sign-off is required prior to embarking on Level 5 training to ensure all pre-requisite skills have been met. Line managers should seek support from local or national Level 5 or Level 6 SLTs where they do not have tracheostomy competency.

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| • Provides appropriately paced, structured training in line with service demands | | |
| • Appreciates different learning styles and pace of learning, appropriately modifying own teaching style to meet the needs of the supervisee | | |
| • Selects appropriate timing and method of feedback delivery to maximally support supervisee and maintains safety in regards to tracheostomy management | | |
| • Determines when a competency has or has not been appropriately demonstrated and provides appropriate and accurate feedback to the supervisee | | |
| • Identifies when additional support might be beneficial to maximally support the supervisee including different sources/approaches of support | | |
| • Seeks out opportunities to receive feedback in regards to ability to provide tracheostomy training, and demonstrates reflective practice | | |
| • Maintains NZSTA e-portfolio e.g. self-reflections, training logs & audits/peer review as per local policy | | |

## 2.6 New Zealand Tracheostomy Advisory Group (Level 6)

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| • Maintains own NZSTA e-portfolio e.g. tracheostomy self-reflections, tracheostomy training logs & tracheostomy audits/peer review as per local policy | | |
| A minimum of two of the below:<br>• Demonstrates extensive knowledge or participation in tracheostomy research or journal publications<br>• Delivers national/international level presentation/teaching pertinent to tracheostomy<br>• Actively contributes to national tracheostomy support & development/SIG-based learning<br>• Receives nomination by two other Level 6 clinicians to attest to the level of tracheostomy skills | | |

## 3.1 Speciality Practice Areas

### Head and Neck Competencies

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

*Tracheostomy management is expected to require an MDT approach, including in particular head and neck surgeons, given the likely anatomical changes associated with the need for tracheostomy.*

*Independent dysphagia management in head and neck cancer is a pre-requisite for this section.*

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| • Understands the anatomical and functional changes between tracheostomy and laryngectomy (permanent stoma) patients | | |
| • Understands clinical requirement for tracheostomy, disease process, treatment intention (I.e. curative versus palliative), predicted treatment trajectory and links in with head and neck MDT as clinically indicated. | | |
| • Has an awareness of appropriate tracheostomy tube types in the context of head and neck cancer disease trajectory | | |
| • Knowledge of surgical interventions and reconstruction options and impact on timing of swallow assessment | | |
| • Understands and appropriately interprets anatomical changes to differentially diagnose causes of dys/aphonia with tracheostomy following surgery/radiotherapy, | | |

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| proactively problem solves cause and appropriately uses one-way valve in this context | | |
| • Knowledge of indications for use of tracheostomy tubes in complex laryngectomy/pharyngolaryngectomy in acute management during the healing process | | |
| • Awareness of how disease progression and bleeding risk impact opportunities for cuff deflation. | | |
| • Able to assess and interpret swallow function and secretion management, and contribute to decision making regarding tracheostomy weaning and decannulation in patients with head and neck cancer. | | |
| • Knowledge of local cancer networks with reference to tracheostomy pathway for patients, including long-term support options. | | |

## Paediatric Competencies

*These competencies only refer to paediatric knowledge with regard to tracheostomy management. They do not encompass the competencies required for independent management of a paediatric dysphagia caseload.*

*Independent management of a caseload of paediatric dysphagia is a pre-requisite for this section.*

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| **Core Paediatric Knowledge**<br>• Understands the implications of changing airway pathology in relation to the tracheostomy and its impact on feeding and communication<br>• Understands the reasons why an infant or child may require a tracheostomy e.g. airway, long term ventilation, neurology<br>• Understands the complications associated with long-term tracheostomy e.g. supra-stomal collapse and granulation tissue<br>• Understands the impact of tracheostomy on typical communication development<br>• Understands the impact of tracheostomy on the acquisition of typical feeding<br>• Recognises potential for change in terms of child development, medical management, and timing of reviews<br>• Able to describe MDT roles in paediatric tracheostomies in hospital and in the community<br>• Has a knowledge of health and safety implications and local policies in working with children with tracheostomy | | |

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| **One-way Valve**<br>• Understands when one-way valve can be considered or may be contraindicated in paediatrics, including in the ventilated population<br>• Understands the pre-requisites for one-way valve in paediatrics<br>• Understands possible pathways to facilitate one-way valve use e.g. downsize and contraindications<br>• Understands the role of the MDT in consideration of one-way valve | | |

## Community and long-term tracheostomy competencies

*Independent dysphagia management of chronic long-term conditions is a pre-requisite for this section.*

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| • Understands complications associated with long-term tracheostomy and the development of feeding and communication skills across the lifespan | | |
| • Understands and explains the scope of the SLT in community tracheostomy management | | |
| • Understands the role of the extended MDT in community tracheostomy management and liaises with colleagues appropriately | | |
| • Demonstrates knowledge of the local support available to patients in their own homes, nursing homes, rehabilitation centres and children's centres and community agencies | | |
| • Demonstrates knowledge of local tracheostomy management protocols in every setting, including ordering processes for tracheostomy equipment (e.g. one-way valves) | | |
| • Demonstrates knowledge of emergency procedures in every setting and awareness of tracheostomy box/ kit location and use | | |
| • Demonstrates knowledge of manufacturer's tracheostomy equipment guidelines, e.g. frequency of changes and | | |

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| required equipment within the home, nursing home or educational setting | | |
| • Recognises inconsistencies in equipment use or tracheostomy care and alerts relevant professional with any concerns | | |
| • Recognises potential for change in patients with long-term tracheostomy and works with the MDT to facilitate habilitation / rehabilitation and weaning | | |

## Neurology Competencies

*Tracheostomy management is expected to require an MDT approach.*

*Independent dysphagia management neurology and neurosurgery is a pre-requisite for this section.*

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| • Understands clinical requirement for tracheostomy in patients presenting with neurological dysfunction | | |
| • Understands trajectory of neurological illness and how this may impact on management/weaning plan | | |
| • Understand impact of neurological dysfunction on communication and swallowing and inter-play with presence of tracheostomy | | |
| • Incorporates additional considerations for weaning in patients with neurological dysfunction (e.g. level of consciousness, bulbar dysfunction, respiratory dysfunction, poor secretion management) | | |
| • Describes swallowing pathophysiology in tracheostomised patients with neurological disorder based on clinical evaluation and/or instrumental assessment | | |
| • Appropriately manages dysphagia, taking into account both neurological impacts and impacts of tracheostomy | | |

## Ventilator Competencies

*Knowledge of international, national and local critical care policy competency in communication and swallowing assessment management with a non-tracheostomised critical care population are pre-requisites for this section.*

| Competency to be gained/maintained within workplace context | Consistent evidence provided to supervisor | Date completed & supervisor signature (sign-off) |
|---|---|---|
| **Knowledge** | | |
| • Demonstrates understanding of the physiology underlying the requirement for ventilation | | |
| • Demonstrates understanding of the difference between invasive and non-invasive modes of ventilation | | |
| • Demonstrates knowledge of the different types and modes of ventilation, use in your local facility and their benefits and complications, e.g.<br>○ Types<br>○ Volume controlled<br>○ Pressure controlled<br>○ Modes<br>○ Mandatory modes such as SIMV<br>○ Non- invasive ventilation such as CPAP, BiPAP, high flow oxygen<br>○ Assisted ventilation such as pressure support | | |
| • Demonstrates knowledge of commonly used terminology, such as<br>○ Fraction of inspired oxygen | | |

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| ○ Inspiratory time<br>○ Minute volume<br>○ Positive inspiratory pressure (PIP)<br>○ Positive expiratory end point pressure (PEEP)<br>○ Tidal volume | | |
| • Demonstrates knowledge of ventilator function and display information | | |
| • Describes the process of gas exchange and implications for management | | |
| • Understands the impact of ventilatory needs on tracheostomy tube type/size/selection | | |
| • Demonstrates knowledge of SLT interventions for communication and swallowing in a ventilated population and their impact on the ventilatory circuit, e.g.<br>○ Cuff deflation/leak speech<br>○ Use of an in line one way valve, such as the Passy-Muir valve (PMV)<br>○ Above cuff vocalisation | | |
| • Describes considerations for in line one way valve usage, including contraindications | | |
| • Understands the signs of non-tolerance of in line one way valve, able to hypothesise cause and troubleshoot solutions, for example discussing with intensive care colleagues options for changing ventilator settings | | |
| • Understands the indications and contraindications for above cuff vocalisation | | |
| • Understands how a change of ventilator modes may indicate a change in tracheostomy weaning management plan | | |

| **Skills** | | |
|---|---|---|
| • Can identify and orientate self to tracheostomy equipment and set up within the context of the ventilator (e.g. suction, ventilator tubing and attachments) | | |
| • Identifies the current method and amount of ventilation and the current ventilator weaning status in a clinical setting | | |
| • Recognises for signs of ventilator disconnection or failure alarms and seeks support | | |
| • Demonstrates ability to place a one way valve, such as a PMV in line with a ventilator circuit, using the appropriate equipment | | |
| • Demonstrates ability to select and consider the most appropriate ventilator conditions within a patients schedule to assess the patient | | |
| • Forms a weaning management plan with consideration of the range of ventilatory conditions for a patient across their day | | |
| • Demonstrates ability to identify potential for a trial of vocal communication in a ventilated patient<br>o Cuff deflation/leak speech<br>o Use of an in line one-way valve, such as the Passy-Muir valve (PMV)<br>o Above cuff vocalisation | | |
| • Contributes to local ICU tracheostomy policy | | |

## 3.1 Related documents

This framework should be read in conjunction with the New Zealand Speech-Language Therapists' Association core documents including:

- NZSTA-Endorsed Tracheostomy Practice Guideline (Speech Pathology Australia, 2021)
- NZSTA Flexible Endoscopic Evaluation of Swallowing (FEES ) Practice Standards (2020)
- NZSTA Flexible Endoscopic Evaluation of Swallowing (FEES ) for Adults – Recommended FEES Procedure (2018)
- NZSTA Flexible Endoscopic Evaluation of Swallowing (FEES) for Children – Recommended FEES Procedure (2018)
- NZSTA Flexible Endoscopic Evaluation of Swallowing (FEES ) for Adults – Recommended FEES Report (2018)
- NZSTA Flexible Endoscopic Evaluation of Swallowing (FEES) for Children – Recommended FEES Report (2018)
- NZSTA Flexible Endoscopic Evaluation of Swallowing (FEES) – Interpretation E-learning module (2018)
- NZSTA VFSS Guideline (2020)
- NZSTA Principles & Rules of Ethics (2015)
- NZSTA Scope of Practice (2012)
- NZSTA Professional Development Policy (2014)
- NZSTA Supervision Policy (2017)
- Competency-based Occupational Standards for Speech Pathologists (2011)
- NZSTA Full Member Return to Practice Framework (2015)

## 3.2 Review

This competency framework is to be reviewed every five years. The review will be overseen by the NZSTA Executive Council. The related NZSTA documents listed above are reviewed every five years.