## **Prosthetic Surgical Voice Restoration (SVR)**

## **Speech and Language Therapists**

## Recommended knowledge/skills

	Date	Initials
Sizing, fitting and using voice prosthesis		
1. Preparation for fitting the prosthesis - therapist		
Knowledge of effective lighting, inserter devices, lubricants.		
Knowledge of the different insertion methods for different prostheses		
Knowledge of risks associated with prosthesis insertion and removal		
Knowledge of safety measures to prevent aspiration of prosthesis.		
2. Measuring tracheoesophageal wall length		
Indications and contraindications for initiating prosthesis fitting.		
Use of gauges and sizers to measure puncture length		
3. Selecting type and style of voice prosthesis		
Knowledge of features of different prostheses:  - method of insertion  Difference in diameters  - indwelling/non-indwelling  - opening pressure  - construction materials / special features eg large oesophageal flange, increased resistance and how related to patient's needs  4. Preparing puncture for prosthesis insertion		
Knowledge of use of tracheoesophageal dilators or stents		
5. Ensuring the prosthesis is capable of shunting lung air into oesophagus		
Knowledge of factors that could interfere with prosthesis function  Knowledge of testing procedures used to identify prosthesis involvement in patient's failure to produce tracheoesophageal sound.  6. Checking patient is comfortable with prosthesis in place		
Knowledge of manoeuvres used to check for prosthesis related discomfort		
7. Checking for leakage around or through prosthesis		
Knowledge of procedures used to determine site of leak		

Knowledge of causes of, and remedies for leaking around and through	
prosthesis	
Teaching the patient to care for prosthesis	
8. Understanding factors which affect the working condition of the prosthesis	
Knowledge of frequency of cleaning, and procedures used to clean the	
prosthesis when it is in the puncture	
Knowledge of frequency of cleaning, and procedures used to clean the	
prosthesis when it has been removed Knowledge of the effects of Candida on the prosthesis, and methods	
of controlling its growth.	
9.Using the prosthesis for voicing	
Knowledge of behaviours which facilitate tracheoesophageal sound.	
Knowledge of behaviours counterproductive to generate	
tracheoesophageal sound.	
Teaching the patient to place the non indwelling	
prosthesis	
10. Inserting the prosthesis - patient	
Knowledge of effective lighting, inserter devices, lubricants and adhesives.	
Knowledge of using catheters or stents to assist insertion.	
Knowledge of the relationship of prosthesis features to ease of insertion.	
Knowledge of risks associated with prosthesis insertion and removal	
Knowledge of safety measures to prevent aspiration of prosthesis.	
Resolving problems related to sound production	
11. Identifying causes of failure to produce sound	
12. Identifying causes of excessive vocal effort	
13. Remediating failure to produce sound	
14. Remediating excessive vocal effort	
Knowledge of causes and alleviation of symptoms associated with puncture	
stenosis or closure.	
Knowledge of causes and alleviation of symptoms associated with puncture	
management.  Knowledge of causes and alleviation of symptoms associated with impedance of	
airflow through the prosthesis.	
Knowledge of causes and alleviation of symptoms associated with impedance of	
airflow through the oesophagus.	

Resolving problems related to leakage from TEP site	
15, Identifying causes of leaking through prosthesis	
16. Identifying causes of leaking around prosthesis	
17. Remediating leakage through or/and around prosthesis	
18. Teaching patient to identify leakage related to prosthesis	
Knowledge of testing procedures to determine location of leak.	
Knowledge of causes and alleviation of symptoms associated with prosthesis deterioration.	
Knowledge of causes and alleviation of symptoms associated with changes in fistula size.	
19. Resolving problems relating to tissue changes	
Knowledge of normal post laryngectomy anatomy and appearance of stoma, trachea, surgical puncture, and neck	
Recognise tissue changes – normal post laryngectomy and abnormal	
Knowledge of procedures for consultation with, or referral to doctor for further evaluation and treatment needed.	
20. Resolving problems related to Stoma Size.	
Knowledge of adaptive devices where stoma is too large for manual occlusion	
Knowledge of methods of overcoming need for tracheostomy tubes or stoma buttons	
Tracheostoma Valves	
21. Selecting appropriate candidates for Tracheostoma Valves	
Knowledge of Tracheostoma Valve structures and functions	
Knowledge of the function, application, use and care of the tracheostoma valve.	
Identify factors which contraindicate or complicate Tracheostoma valve use and retention	
Knowledge of methods of measuring intratracheal pressure during speech.	
Knowledge of the causes of excessive intratracheal pressure.	
Knowledge of the relationship between peristomal configuration and tracheostoma valve retention.	
22. Fitting the Tracheostoma Valve	
23. Applying Valve Housing to Peristomal area	
Knowledge of procedures used to prepare peristomal area.	
Knowledge of manufacture's instructions related to fitting tracheostoma valve.	

Knowledge of alignment of housing with stoma.	
Selecting appropriate Tracheostoma valve	
24. Knowledge of types and features of available tracheostoma valves	
Knowledge of advantages and disadvantages of range of tracheostoma valves available	
Knowledge of tracheostoma valve sensitivity and adjustments	
Selection of appropriate type of tracheostoma valve to suit each patient	
25. Teaching the patient (or carer) to care for Tracheostoma valve	
Knowledge of manufacturer's cleaning instructions – tracheostoma valve and housing.	
Knowledge of range and functions of tracheostoma valve housings	
26. Applying the housing and tracheostoma valve	
Knowledge of procedures used to prepare peristomal area.	
Knowledge of adhesive and solvents related to tracheostoma valves.	
Knowledge of manufacturer's instructions relating to attachment.	
Knowledge of alignment of housing with stoma.	
27. Teaching the patient to use tracheostoma valve	
Knowledge of the relationship between intratracheal pressure, valve closure, and retention of housing seal.	
Knowledge of the optimum methods of using tracheostoma valve for voicing	
Knowledge of limitations of tracheostoma valves	
28. Safety precautions when using Tracheostoma Valve	
Knowledge of safety precautions when using Tracheostoma Valve	
Knowledge of methods used to prevent valve loss.	
29. Maintaining the seal of tracheostoma valve housing	
Knowledge of methods of reducing airflow resistance in the prosthesis.	
Knowledge of methods of reducing airflow resistance in the oesophagus and pharyngoesophageal segment.	
Knowledge of methods of modifying the tracheostoma valve housing including: - altering the shape of the existing housing	
- construction a customised housing from a mould of the peristomal area - enlarging the housing surface with adhesive tape	
Knowledge of range of available adhesive materials and methods of attachment	
Knowledge of range of remedial actions to resolve problems related to maintaining the seal of tracheostoma valve housing	