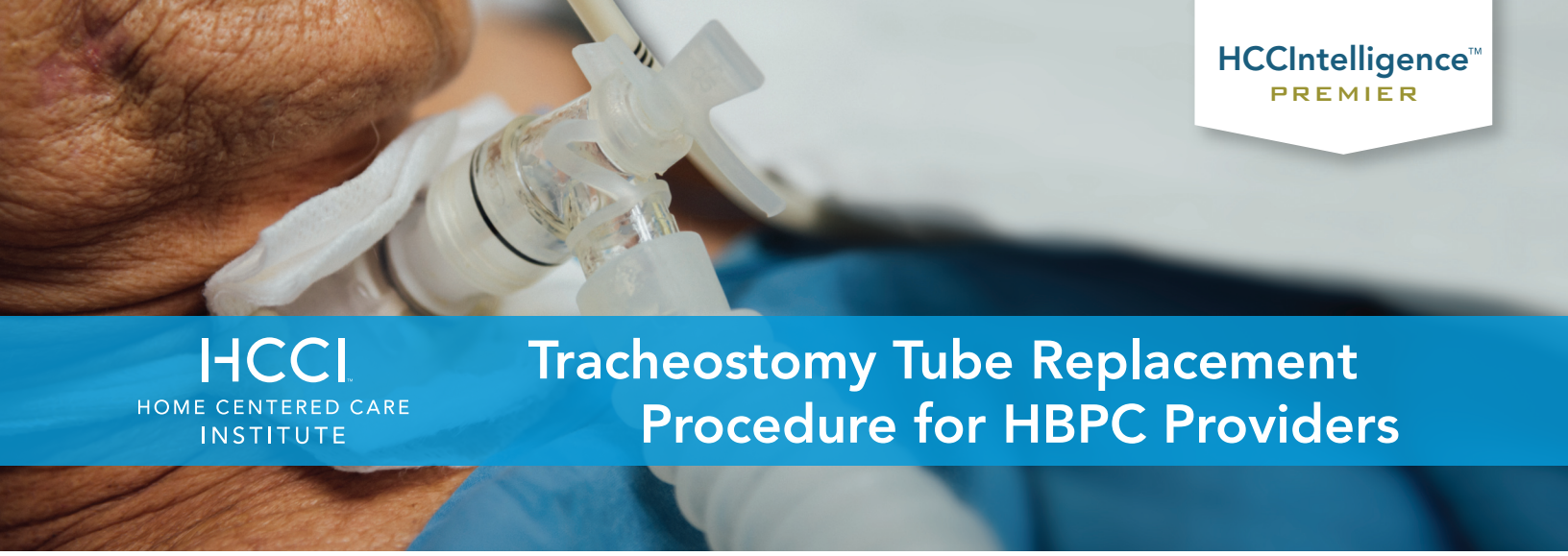

HCCIntelligence™ PREMIER

HCCI HOME CENTERED CARE INSTITUTE

Tracheostomy Tube Replacement Procedure for HBPC Providers

Purpose	This resource is intended for home-based primary care (HBPC) providers and practice staff to describe step-by-step instructions for replacement of a tracheostomy tube in the home setting.
Equipment	☐ Clean table or other surface ☐ Gloves ☐ Clean surface barrier ☐ Suction catheter ☐ Suction machine ☐ Supplemental oxygen, if available ☐ Clean, functional tracheostomy tube kit (including obturator and inner cannula) ☐ 10 ml syringe to inflate tracheostomy tube cuff ☐ One size smaller tracheostomy tube available (in case you are unable to insert current size tube) ☐ Manual respiratory resuscitation bag ☐ Gauze or tube dressing ☐ Tracheostomy ties ☐ Rolled-up towel to assist in the positioning of the patient's neck ☐ Clean, soft towel or gauze to wipe away secretions ☐ Water-soluble lubricant ☐ Pulse oximeter ☐ Surgical mask ☐ Eye protection ☐ Stethoscope ☐ Flashlight or headlight If possible, have an additional person to assist.

Procedure

Tracheostomy Tube Replacement Instructions

1. Wash hands.
2. Ideally, position the patient supine or semi-recumbent and at a comfortable height for the provider. (see Figure 1)
3. The provider should stand on the side of the patient that is most comfortable for the procedure.
4. Make sure there is good lighting available.
5. The patient's neck area should be free of any clothing.
6. If needed, suction the patient prior to the tracheostomy tube change.

Figure 1. Patient positioned supine or semi-recumbent

7. Place sterile field (usually glove packaging) on clean table and place new tracheostomy, obturator, tracheostomy ties, inner cannula, dressing, and water-soluble lubricant on the field. (see Figure 2)
8. Put on mask, eye protection, and then gloves.

Figure 2. Place sterile field (usually glove packaging) on clean table and place new tracheostomy, obturator, tracheostomy ties, inner cannula, dressing, and water-soluble lubricant on the field

9. Prior to insertion, examine all components of the new tracheostomy tube for defects and inject air into the cuff to test for leakage. (see Figure 3)

Figure 3. Examine all components of the new tracheostomy tube for defects and inject air into the cuff to test for leakage

10. Insert obturator into tracheostomy tube and put a small amount of water-soluble lubricant on the tip of the tracheostomy tube.(see Figure 4)

Figure 4. Insert obturator into tracheostomy tube and put a small amount of water-soluble lubricant on the tip of the tracheostomy tube

Procedure

Tracheostomy Tube Replacement Instructions (continued)

11. Remove tracheostomy ties and gently clean tracheostomy site with clean wash cloth. (see Figure 5)
12. Prior to removal, deflate the balloon if the current tracheostomy tube is cuffed.
13. If applicable, disconnect ventilator tubing from the tracheostomy tube or remove oxygen mask.
14. Using a curved motion, remove the old tracheostomy tube and discard.
15. Use a flashlight or headlight to inspect the stoma for skin breakdown or granulating tissue. (optional, for use in setting of poor lighting)
16. Wipe any debris away from the stoma opening using a clean gauze.

Figure 5. Remove tracheostomy ties and gently clean tracheostomy site with clean wash cloth

17. Insert tracheostomy tube into stoma using a curved motion. (see Figure 6)
    a. Note that there may be mild resistance as the balloon passes through the stoma. Do not advance the tracheostomy tube if more marked resistance is encountered. If this occurs, remove the tube, reposition the patient, inspect the tracheostomy site, then attempt again to reinsert the tube. It may be helpful to rotate the tube 90 degrees then slowly rotate back to a neutral position as the tube is advanced. If unable to insert, the smaller tracheostomy should be inserted.
18. Remove obturator once the tracheostomy tube is in place.
    a. Note, obturator should be available if the tracheostomy tube becomes accidently dislodged and reinsertion is necessary.

Figure 6. Insert tracheostomy tube into stoma using a curved motion

Procedure

Tracheostomy Tube Replacement Instructions (continued)

19. Insert the inner cannula into the tracheostomy tube and lock into place. (see Figure 7)
20. Inflate the tracheostomy tube cuff with the appropriate amount of air. This is typically what the patient/caregiver has found to be comfortable and also prevent air leaks.
21. Reconnect the ventilator tubing or place oxygen mask back over the tracheostomy tube.
22. Wipe off any mucous or blood around the stoma with a clean gauze.
23. Secure new tracheostomy tube with new tracheostomy ties tight enough to slip one finger underneath the tie.
24. Place gauze underneath neck plate of tracheostomy tube.
25. If needed, suction the patient post-procedure.
26. Post-procedure, assess the patient's respiratory status, auscultate lungs for breath sounds, check oxygen saturation level, and evaluate the patient for any discomfort.
27. Dispose of all used material in a trash can.
28. Document procedure, inclusive of type of tube, lot number, and expiration date.
29. Order a replacement tracheostomy tube for the patient to have at home in case it is needed.
30. Order replacement inner cannula for tracheostomy tube in case it is needed.

Figure 7. Insert the inner cannula into the tracheostomy tube and lock into place

Other Considerations

- The first tracheostomy tube change after initial placement (defined as 3-7 days post-procedure) should be done in a hospital or other controlled environment due to increased risks of complications.[1]
- There is currently no consensus recommendation regarding the frequency of tracheostomy tube changes[2]; however, one study recommends tracheostomy tube change every 3 months due to biofilm formation on the tracheostomy tube, which may affect the structural integrity of the tube.[3]
- Tracheostomy changes can be done under clean or sterile conditions.[2,4]

[1] Tabee A, et al. Practice patterns, safety, and rationale for tracheostomy tube changes a survey of otolaryngology training programs. Laryngoscope 2007; 117 (4): 573–576

[2] Sherman JM et al. Care of child with chronic tracheostomy: Official statement of the American Thoracic Society. Am J Respir Crit Care Med 2000;161(1): 297308

[3] Backman S et al.-Material wear of polymeric tracheostomy tube: a six months study. Laryngoscope 2009; 119 (4): 657-664

[4] Yaremchuk K. Regular tracheostomy tube changes to prevent formation of granulation tissue. Laryngoscope. 2003 Jan. 113 (1):1-10

Other Considerations (continued)	• If provider is unable to insert tracheostomy tube into stoma, the following should be attempted: ➤ Reposition the patient. ➤ Try to insert a smaller-size tube into the trachea opening. ➤ If the above is not successful, cover the stoma area and place face mask of the manual respiratory resuscitation mask over the patient's nose and mouth and give one breath every 5 seconds. ➤ Call 911 and begin CPR.
Billing	• CPT guidelines suggest that routine tracheostomy tube changes are bundled into the work of the E/M service. Therefore, they are not separately reportable. Please refer to the below explanation for the only CPT code that exists today so you can make the best determination for how your practice will handle reimbursement. • CPT 31502 Defined by CPT as tracheostomy tube change prior to the establishment of the fistula tract. Reimbursement for tracheostomy tube in the home may not be available or appropriate to bill since the code description specifically refers to this code as "prior to the establishment of a fistula tract." If your practice routinely provides this service, you should consider if the additional time and complexity of the visit warrants a higher level of E/M service or reach out to your Medicare Administrative Contractor (MAC) with a specific example to confirm if they will reimburse under these circumstances.

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The John A. Hartford Foundation

HCCIntelligence™ is funded in part by a grant from The John A. Hartford Foundation.