The Value of Speech-Language Pathologists (SLPs) in Acute Care



SLP Involvement in Acute Care Improves Healthcare Quality and Reduces Cost.

Better Patient Health Outcomes

Patients with stroke seen by SLPs in acute care are...

- Less likely to experience death following dysphagia treatment (27%), evaluation (58%), and screening (71%).^{1,2}
- Less likely to develop pneumonia (39%-44%) or dysphagia-related complications.¹⁻³
- More likely to achieve an oral diet (19%) and to functionally swallow at 6 months post discharge following swallowing treatment (41%).²

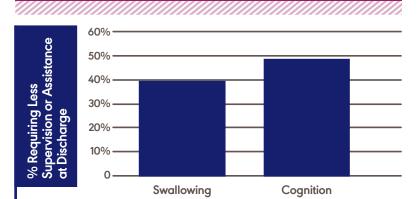
Patients with tracheostomy seen by an acute-care interdisciplinary team including SLPs...

- Are more likely to tolerate oral diets (89%).4
- Initiate oral diets an average of 12 days sooner.⁵
- Are more likely to undergo cuff deflation (7%).⁶
- Decannulate an average of 6-8 days sooner.^{5,7,8}
- Are less likely to experience tracheostomy tube blockages (68%), rapid response calls for respiratory distress (55%), or other adverse events (25%).^{6,9}
- Patients with post-extubation dysphagia seen by SLPs in acute care...
 - Successfully resume oral diets and eliminate G-tube dependency (87%).9

Better Patient Communication

Patients who are intubated and are seen by SLPs in acute care...

- Successfully communicate pain symptoms 4 times more often.¹¹
- Are less likely to experience difficulty communicating with staff (60%).¹²
- Patients with tracheostomy who receive SLP intervention in acute care...
 - Gain functional vocalization (88%) and begin to phonate,
 - on average, **11 days** earlier.^{12, 13}
 - Verbally communicate an average of 9 days sooner.¹⁴
 - Are **2-3 times*** more likely to use speaking valves.⁷
 - Participate in speaking valve trials an average of 16 days* sooner.7



40% of patients with swallowing disorders and 49% of patients with cognitive-communication disorders treated by SLPs in acute care required less supervision or assistance at discharge.¹⁸

Lower Hospital Costs

Patients with stroke seen by SLPs in acute care have...

- A shorter length of stay (LoS) by an average of **3 days**.³
- Patients with partial laryngectomy seen by SLPs in acute care are... • Safely discharged on an oral diet (52%) following a 2-day intensive
 - dysphagia treatment, with an average cost savings of \$8,000.10

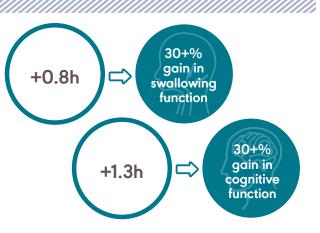
Patients with tracheostomy seen by an acute-care interdisciplinary team including SLPs have...

- A shorter LoS by an average of **8 days**.⁸
- A shorter LoS in the ICU by an average of 15 days.8



Medical team members who receive training by an SLP in acute care...

- Are 3 times more likely to use writing, gestures, lipreading, and yes/no questions.¹⁵
- Are 6 times more likely to be confident using augmentative and alternative communication tools with patients with severe communication deficits.¹⁶
- Are more confident when communicating with people with aphasia (63%).¹⁷
- Can identify an average of 37 more relevant communication strategies.¹⁸
- Are more likely to be confident in working with people with tracheostomy (27%^{*}).⁶



Compared with those who made no progress, patients who made a **30+%** functional gain in swallowing or cognition received, on average, only **1 additional hour** of SLP treatment.¹⁸

References

¹ Carnaby, G., Hankey, G. J., & Pizzi, J. (2006). Behavioural intervention for dysphagia in acute stroke: A randomized controlled trial. *The Lancet. Neurology*, *5*(1), 31-37. <u>https://doi.org/10.1016/S1474-4422(05)70252-0</u>

² Bray, B. D., Smith, C. J., Cloud, G. C., Enderby, P., James, M., Paley, L., Tyrrell, P. J., Wolfe, C. D., Rudd, A. G., & SSNAP Collaboration (2017). The association between delays in screening for and assessing dysphagia after acute stroke, and the risk of stroke-associated pneumonia. *Journal of Neurology, Neurosurgery, and Psychiatry, 88*(1), 25-30. https://doi.org/10.1136/jnnp-2016-313356

³ Bath, P. M., Lee, H. S., & Everton, L. F. (2018). Swallowing therapy for dysphagia in acute and subacute stroke. *The Cochrane Database of Systematic Reviews*, *10*(10), CD000323. <u>https://doi.org/10.1002/14651858.CD000323.pub3</u>

⁴ Mah, J. W., Staff, I. I., Fisher, S. R., & Butler, K. L. (2017). Improving decannulation and swallowing function: A comprehensive, multidisciplinary approach to post-tracheostomy care. *Respiratory Care, 62*(2), 137-143. https://doi.org/10.4187/respcare.04878

⁵ Speed, L., Harding, K. (2013). Tracheostomy teams reduce total tracheostomy time and increase speaking valve use: A systematic review and meta-analysis. *Journal of Critical Care, 28*(2):216 e1. https://doi.org/10.1016/j.jcrc.2012.05.005

⁶ Parker, V., Giles, M., Shylan, G., Austin, N., Smith, K., Morison, J., & Archer, W. (2010). Tracheostomy management in acute care facilities–A matter of teamwork. *Journal of Clinical Nursing*, 19(9-10), 1275–1283. <u>https://doi.org/10.1111/j.1365-2702.2009.03155.x</u>

⁷ Cameron, T. S., McKinstry, A., Burt, S. K., Howard, M. E., Bellomo, R., Brown, D. J., Ross, J. M., Sweeney, J. M., & O'Donoghue, F. J. (2009). Outcomes of patients with spinal cord injury before and after introduction of an interdisciplinary tracheostomy team. Critical care and resuscitation: *Journal of the Australasian Academy of Critical Care Medicine*, 11(1), 14-19.

⁸ Santos, A., Harper, D., Gandy, S., and Buchanan, B. (2018). 1214: The positive impact of multidisciplinary tracheostomy team in the care of post-tracheostomy patients. *Critical Care Medicine*, *46* (1), 591.

⁹ El Gharib, A. Z. G., Berretin-Felix, G., Rossoni, D. F., & Seiji Yamada, S. (2019). Effectiveness of therapy on post extubation dysphagia: Clinical and electromyographic findings. *Clinical Medicine Insights. Ear, Nose and Throat*, 12, 1179550619873364. <u>https://doi.org/10.1177/1179550619873364</u>

¹⁰ Wasserman T, et al. (2001). Management of swallowing in supraglottic and extended supraglottic laryngectomy patients. *Head and Neck, 23*(12): 1043-1048. <u>https://doi.org/10.1002/hed.1149</u>

¹¹ Happ, M. B., Garrett, K. L., Tate, J. A., DiVirgilio, D., Houze, M. P., Demirci, J. R., George, E., & Sereika, S. M. (2014). Effect of a multi-level intervention on nurse-patient communication in the intensive care unit: results of the SPEACS trial. *Heart & Lung: The Journal of Critical Care, 43*(2), 89-98. https://doi.org/10.1016/j.hrtlng.2013.11.010

¹² Petosic, A., Viravong, M. F., Martin, A. M., Nilsen, C. B., Olafsen, K., & Berntzen, H. (2021). Above cuff vocalisation (ACV): A scoping review. Acta Anaesthesiologica Scandinavica, 65(1), 15-25. <u>https://doi.org/10.1111/aas.13706</u>

¹³ Freeman-Sanderson, A. L., Togher, L., Elkins, M. R., & Phipps, P. R. (2016). Return of voice for ventilated tracheostomy patients in ICU: A randomized controlled trial of early-targeted intervention. *Critical Care Medicine*, 44(6), 1075–1081. <u>https://doi.org/10.1097/CCM.000000000001610</u>

¹⁴ Sutt, A. L., Cornwell, P., Mullany, D., Kinneally, T., & Fraser, J. F. (2015). The use of tracheostomy speaking valves in mechanically ventilated patients results in improved communication and does not prolong ventilation time in cardiothoracic intensive care unit patients. *Journal of Critical Care, 30*(3), 491-494. <u>https://doi.org/10.1016/j.jcrc.2014.12.017</u>

¹⁵ Trotta, R. L., Hermann, R. M., Polomano, R. C., & Happ, M. B. (2020). Improving nonvocal critical care patients' ease of communication using a modified SPEACS-2 program. *Journal for Healthcare Quality: Official Publication of the National Association for Healthcare Quality,* 42(1), e1-e9. https://doi.org/10.1097/JHQ.000000000000163

¹⁶ Vento-Wilson, M. T., McGuire, A., & Ostergren, J. A. (2015). Role of the speech-language pathologist: Augmentative and alternative communication for acute care patients with severe communication impairments. *Dimensions of Critical Care Nursing: DCCN, 34*(2), 112–119. <u>https://doi.org/10.1097/DCC.00000000000094</u>

¹⁷ Cameron, A., Mcphail, S., Hudson, K., Fleming, J., Lethlean, J., & Finch, E. (2016). A pre-post intervention study investigating the confidence and knowledge of health professionals communicating with people with aphasia in a metropolitan hospital. *Aphasiology, 31*, 1-16. https://doi.org/10.1080/02687038.2016.1225277

¹⁸ American Speech-Language-Hearing Association. (2022). National Outcomes Measurement System (NOMS): SLP Healthcare Registry. <u>www.asha.org/NOMS</u>