Message from Guest Editor

Healthcare Beyond the Airway

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Improvements in modern tracheostomy care have swiftly evolved beyond technical, patient-level concerns: securing the airway, managing the tube, and preventing the complication. In their 2020 study, Brenner et al.[1] identify a paradigm shift in tracheostomy care, matching overall healthcare trends in emphasizing systems-level improvements. The articles in this issue resonate with that message. The quality of tracheostomy care is defined by how well we integrate engineering, economics, human experience, and interprofessional systems into a coherent model of safety.[1-3] The Global Tracheostomy Collaborative stands at the forefront of this movement towards systems-based improvements by seeking the best approaches across disciplines.[1]

Our first feature article by Michael et al.[4] shows how optimizing tracheostomy tube design and personalized clinical protocols can improve communication and safety for patients with a tracheostomy. Communication is considered the most common problem faced by patients and their caregivers.[5] The isolation arising from barriers to speech has a profound effect on mental and physical well-being, with persistent social isolation being a predictor for cardiovascular disease, mental health disorders, and mortality.[6,7] We welcome research that rigorously explores voice restoration, a critical component of impaired communication.

The next featured study by Ünal et al.[8] provides clear evidence that chronic colonization and the requirement for ongoing home ventilation significantly reduce the likelihood of successful decannulation. These findings underscore the importance of closely monitoring feeding and swallowing disorders and ensuring consistent multidisciplinary follow-up for medically complex children. Decannulation outcomes are shaped not only by underlying diagnoses but by longitudinal factors that can be identified and addressed through structured, coordinated care.[9]

The findings by Lenze et al.[10] in this issue are revealing of a different kind of threat to patients with a tracheostomy. Out-of-pocket costs and surprise billing in the US healthcare system are not peripheral policy concerns; they are threats to survival.[11] A family forced into medical debt will ration supplies, delay follow-up, or decline essential care. These behaviors directly influence declines in physical and mental health.[12] Financial vulnerability must be viewed as a clinical risk factor, and one that directly influences treatment "nonadherence.[13]"

Equally important are the lived experiences highlighted in this issue by Brenner et al.[14] Patients and caregivers consistently report fear, stigma, isolation, and disrupted access to supplies. These signals are echoed throughout the literature[15] and in our clinical spaces, and represent a persistent and resilient threat to well-being. Patients with tracheostomy face, as the authors describe, an underexplored "compounded vulnerability" in their psychosocial wellness.[16] Their work explores the struggles that hum in the background for those with chronic illness, such as those reliant on a tracheostomy.

Finally, the commentary by Pandian and Brenner[17] on the International Council of Nurses' framework provides a needed reminder that tracheostomy care is fundamentally a team endeavor, and our current variability in training, communication, and role clarity remains a barrier to safe practice and staff retention.[18,19] The authors highlight how the ICN framework aligns with the goals of the Global Tracheostomy Collaborative, particularly in strengthening interprofessional teamwork and supporting patient and family engagement. By clarifying nursing roles and reinforcing shared accountability across disciplines, the updated definitions provide a common language to guide care coordination, education, and transitions from hospital to home for individuals with a tracheostomy.

This issue advances the conversation on improving the overlapping health systems that represent the future of tracheostomy care. This issue demonstrates the value of integrating diverse perspectives, from engineering and health services research to qualitative insights and professional frameworks, to understand better the needs of individuals living with a tracheostomy. We hope you find that this issue offers the evidence and the imperative for strengthening communication, coordination, and safety across settings.

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REFERENCES

1. Brenner MJ, Pandian V, Milliren CE, et al. Global Tracheostomy Collaborative: data-driven improvements in patient safety through multidisciplinary teamwork, standardisation, education, and patient partnership. *British Journal of Anaesthesia*. 2020;125(1):e104-e118. doi:10.1016/j.bja.2020.04.054

2. McGrath BA, Lynch J, Bonvento B, et al. Evaluating the quality improvement impact of the Global Tracheostomy Collaborative in four diverse NHS hospitals. *BMJ Qual Improv Report*. 2017;6(1):bmjqir.u220636.w7996. doi:10.1136/bmjquality.u220636.w7996

3. Brenner MJ, Pandian V. Elevating Tracheostomy Care Through Data-Driven Innovation: What Can Education, Evidence-Based Practice, and Quality Improvement Learn from One Another? *Tracheostomy*. 2024;1(2):1-6.

4. Michael A, Erfani R, McGrath BA, Wallace S, Jamshidi R. Above Cuff Vocalisation in Tracheostomised Patients: Defining Optimal Airflow Thresholds Using Computational Fluid Dynamics. *Tracheostomy*. 2025;2(3).

5. McGrath BA, Wallace S, Lynch J, et al. Improving tracheostomy care in the United Kingdom: results of a guided quality improvement programme in 20 diverse hospitals. *Br J Anaesth*. 2020;125(1):e119-e129. doi:10.1016/j.bja.2020.04.064

6. Brown V, Morgan T, Fralick A. Isolation and mental health: thinking outside the box. *Gen Psychiatr*. 2021;34(3):e100461. doi:10.1136/gpsych-2020-100461

7. González-Sanguino C, Ausín B, Castellanos MÁ, et al. Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain. *Brain Behav Immun*. 2020;87:172-176. doi:10.1016/j.bbi.2020.05.040

8. Ünal F, Telhan L, Teber BG, et al. Factors Associated with Decannulation in Pediatrics. *Tracheostomy*. 2025;2(3).

9. Calderone A, Filoni S, De Luca R, et al. Predictive Factors of Successful Decannulation in Tracheostomy Patients: A Scoping Review. *J Clin Med*. 2025;14(11):3798. doi:10.3390/jcm14113798

10. Lenze NR, Kler JS, Perera CD, et al. Out-of-Pocket Costs and Potential Surprise Bills for Tracheostomy in Commercially Insured Patients. *Tracheostomy*. 2025;2(3).

11. Ekwueme DU, Zhao J, Rim SH, et al. Annual Out-of-Pocket Expenditures and Financial Hardship Among Cancer Survivors Aged 18-64 Years - United States, 2011-2016. *MMWR Morb Mortal Wkly Rep*. 2019;68(22):494-499. doi:10.15585/mmwr.mm6822a2

12. Aborode AT, Oginni O, Abacheng M, et al. Healthcare debts in the United States: a silent fight. *Ann Med Surg (Lond)*. 2025;87(2):663-672. doi:10.1097/MS9.0000000000002865

13. Osborn CY, Kripalani S, Goggins KM, Wallston KA. Financial strain is associated with medication nonadherence and worse self-rated health among cardiovascular patients. *J Health Care Poor Underserved*. 2017;28(1):499-513. doi:10.1353/hpu.2017.0036

14. Brenner MJ, Moser CH, Ward E, et al. The Lived Experience of Individuals with a Tracheostomy and their Caregivers: A Qualitative Analysis. *Tracheostomy*. 2025;2(3). doi:10.62905/001c.140856

15. Weidlich S, Pfeiffer J, Kugler C. Self-management of patients with tracheostomy in the home setting: a scoping review. *J Patient Rep Outcomes*. 2023;7(1):101. doi:10.1186/s41687-023-00643-2

16. Ward E, Pandian V, Brenner MJ. The Primacy of Patient-Centered Outcomes in Tracheostomy Care. *Patient*. 2018;11(2):143-145. doi:10.1007/s40271-017-0283-3

17. Pandian V, Brenner MJ. A Shared Vision for Tracheostomy Care: How the ICN's Updated Framework Strengthens Collaboration. *Tracheostomy*. 2025;2(3). doi:10.62905/001c.133583

18. Panari C, Caricati L, Pelosi A, Rossi C. Emotional exhaustion among healthcare professionals: the effects of role ambiguity, work engagement and professional commitment. *Acta Biomed*. 2019;90(6-S):60-67. doi:10.23750/abm.v90i6-S.8481

19. Cengiz A, Yoder LH, Danesh V. A concept analysis of role ambiguity experienced by hospital nurses providing bedside nursing care. *Nursing & Health Sciences*. 2021;23(4):807-817. doi:10.1111/nhs.12888