Study Title:

Impact of a Tracheostomy Team Implementation on Length of Stay and Unplanned Decannulation

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PI: John Emberger

Sub Investigators:

Thomas Gillin, Kathleen Luckner, Janet Sechrist, Andrew Phillips, Kyle Hitchens, Kathleen Bonis, Dawn Gillin

Research Coordinator: John Emberger

Department: Respiratory Care

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1. Objectives

The purpose of this study is to evaluate the impact of a specialized tracheostomy team on hospital length of stay (LOS) and unplanned decannulation (UPD) rates in adult tracheostomy patients.

Primary Objective:

- Assess the effect of tracheostomy team implementation on hospital LOS.

Secondary Objectives:

- Evaluate the impact on UPD rates.
- Analyze the effect on in-hospital survival rates.

2. Background and Rationale

Patients with tracheostomies often face prolonged hospital stays and are at risk for safety events such as UPDs. The implementation of a specialized tracheostomy team aims to standardize care, improve outcomes, and enhance patient safety. Preliminary data suggest that such teams can reduce LOS and UPD rates, thereby improving overall patient outcomes.

3. Study Design

- **WHO:** Adult tracheostomy patients on general floors.
- **WHAT:** Retrospective review comparing pre- and post-implementation periods of a tracheostomy team.
- **WHERE:** Christiana Hospital
- **WHEN:** Pre-intervention: January 1, 2022 - December 31, 2023; Post-intervention: March 1, 2024 - April 2025
- **HOW:** Data extracted from EMR, including demographic information, tracheostomy days, UPD events, and survival rates

Potential Limitations:

- Retrospective design and reliance on existing documentation.
- Potential confounders not fully adjusted.

Risks:

- Minimal; data are de-identified and retrospective.

Benefits:

- Improved patient outcomes and safety in tracheostomy care for future patients.

Monitoring:

- Data reviewed internally by the study team

4. Informed Consent

This is a retrospective chart review and qualifies for a waiver of informed consent.

Waiver Justification:

- Minimal risk.
- No adverse effect on rights or welfare.
- Study could not be practically conducted without waiver.
- No interaction or follow-up with patients is required.

5. Confidentiality & Security

Data will be stored in a secure, access-controlled electronic format.

- Identifiers will be removed or coded.
- No PHI will be used outside the institution.

6. HIPAA Waiver Justification

- Minimal privacy risk due to de-identification plan.
- Identifiers will be destroyed post-analysis.
- No reuse or unauthorized disclosure.

7. Supporting Documents

- IRB expedited review form

8. References

- Speed, L., & Harding, K. E. (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.
- Ninan, A., Grubb, L. M., Brenner, M. J., & Pandian, V. (2023). Effectiveness of interprofessional tracheostomy teams: A systematic review. Journal of clinical nursing, 32(19-20), 6967-6986.