Emergency and Transport Tracheostomy Supplies: A Quality Improvement Project

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**BACKGROUND**

- The incidence of tracheostomy is on the rise (Cox et al., 2004)
- Patients with tracheostomy are at a very high risk for harm since even small airway problems can quickly develop into life-threatening emergencies
- Emergency and transport supplies are mandated at bedside to address critical airway emergencies
- However, nurses are unable to meet the supply and demand of supplies at bedside due to numerous obligations
- Several patient safety reports were of concern requiring intervention

**METHODS**

- Four phases:
  - Phase I: Retrospectively reviewed Patient Safety Net (PSN) reporting system of adverse events
  - Phase II: Reviewed patient charts to identify the number of times a tracheostomy patient was transported away from bedside over a period of one month
  - Phase III: Intervention:
    - Informed nurse managers regarding data from PSNs
    - Educated nurses on newly developed emergency and transport supply bags
    - Conducted a trial of the bags
  - Phase IV: Conducted a post-trial survey of nurses to assess the feasibility of the new tracheostomy bags

**RESULTS**

<table>
<thead>
<tr>
<th>Identified Cause of Patient Safety Event</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Equipment unavailable/away from bedside</td>
<td>2 (13)</td>
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<tr>
<td>Equipment missing from bedside</td>
<td>4 (27)</td>
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<tr>
<td>Unit supply issue</td>
<td>10 (70)</td>
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</tbody>
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**DISCUSSION**

- This quality improvement project suggests that:
  - The number of PSNs related to equipment is concerning
  - The number of transports in one month indicates the significant need to prevent future PSNs
  - The use of a special emergency and transport bag is feasible
  - The majority of nurses were satisfied with the new emergency and transport supply bags

**LIMITATIONS**

- Limitations of this project include:
  - It is a quality improvement project with only three units that conducted pilot trial
  - The number of nurses who responded to the survey was very minimal

**CONCLUSIONS AND FUTURE DIRECTIONS**

- Given the number of PSNs, number of transports, feasibility of emergency and transport supply bags, and nurses’ satisfaction, it is vital to mandate this practice throughout the hospital
- Collect post pilot intervention PSN data
- Conduct a larger prospective study to further evaluate the efficacy of using specialized tracheostomy bags

**REFERENCES**


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**Tracheostomy Supplies Bag and Packing List**

1. pair of scissors
2. packs suction catheters
Tracheostomy fastener
10mL syringe
Nasal tubes
Sterile gloves 7.0 and 7.5
Kelly clamp
Flexible adapter
Yankauer Suction
Lubricating jelly
Cuffed Siloey trach tubes - 6.0 and 4.0