

Enhancing gastrostomy tube care: A qualitative insight into G-tube safety and related policy dissemination at a large academic tertiary care center

Xiyu Zhao¹, Danna Lamont², Sarah Osorio², Jacob Blum¹, Carolyn Im¹, Siam Muquit¹, Ariel Leong¹, Oren Wei¹, Aaron Bao¹, Shreya Sriram¹, Setu Mehta¹, Renee Blanding MD³

¹ Johns Hopkins University School of Medicine, Baltimore, MD, USA; ² Johns Hopkins University School of Nursing, Baltimore, MD, USA; ³ Johns Hopkins Bayview Medical Center, Baltimore, MD, USA

Introduction

- Gastrostomy tube (G-tube) placement is a standard procedure for patients requiring long-term enteral access.
- Techniques include percutaneous endoscopic gastrostomy (PEG), fluoroscopy-guided gastrostomy, and open or laparoscopic gastrostomy.
- Recognizing adverse events and understanding mortality rates are crucial for patient care. Tube dislodgment is a significant complication, prompting new hospital-wide enteral nutrition policies.

Objectives

- To explore gastrostomy tube dislodgment cases within seven to ten days of placement at a tertiary care center.
- To provide recommendations for safer placement and maintenance of gastrostomy tubes in the adult inpatient setting
- To determine gaps in G-tube workflow in various departments and practice settings
- To understand whether there are differences in G-tube placement techniques across specialties and associated clinical outcomes.

Materials and Methods

- Hour-long qualitative interviews with physicians and nurses involved in G-tube placement and maintenance were conducted.
- Stakeholders were asked about their experiences, thoughts on recent policies, policy dissemination, and suggestions for improvement.
- Content and thematic analyses were performed using NVivo 1.0.

Results

Table 1. Interviewee Demographics

	Role	Unit / Department
1	Physician	Otolaryngology
2	Physician	General Surgery
3	Nurse	SICU
4	Nurse	CICU
5	Nurse	Medicine
6	Nurse	Surgery
7	Nurse	MICU
8	Nurse	NCCU
9	Nurse	PCU

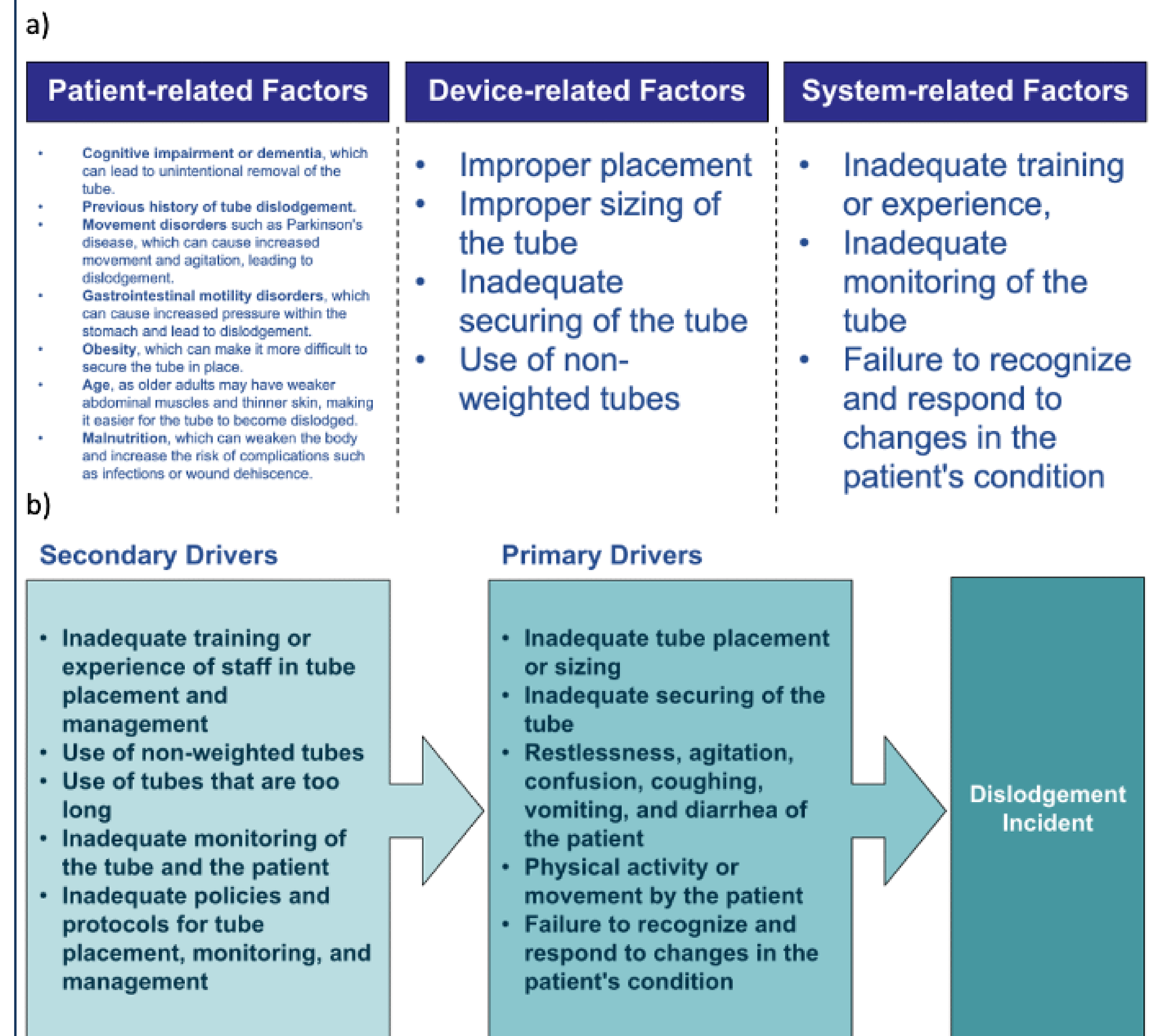


Figure 1. Factor analysis and driver diagram

(a) Patient, device, and system-related factors that can contribute to potential G-tube dislodgment were identified through interviews. (b) Secondary and primary drivers are highlighted as potential factors for intervention.

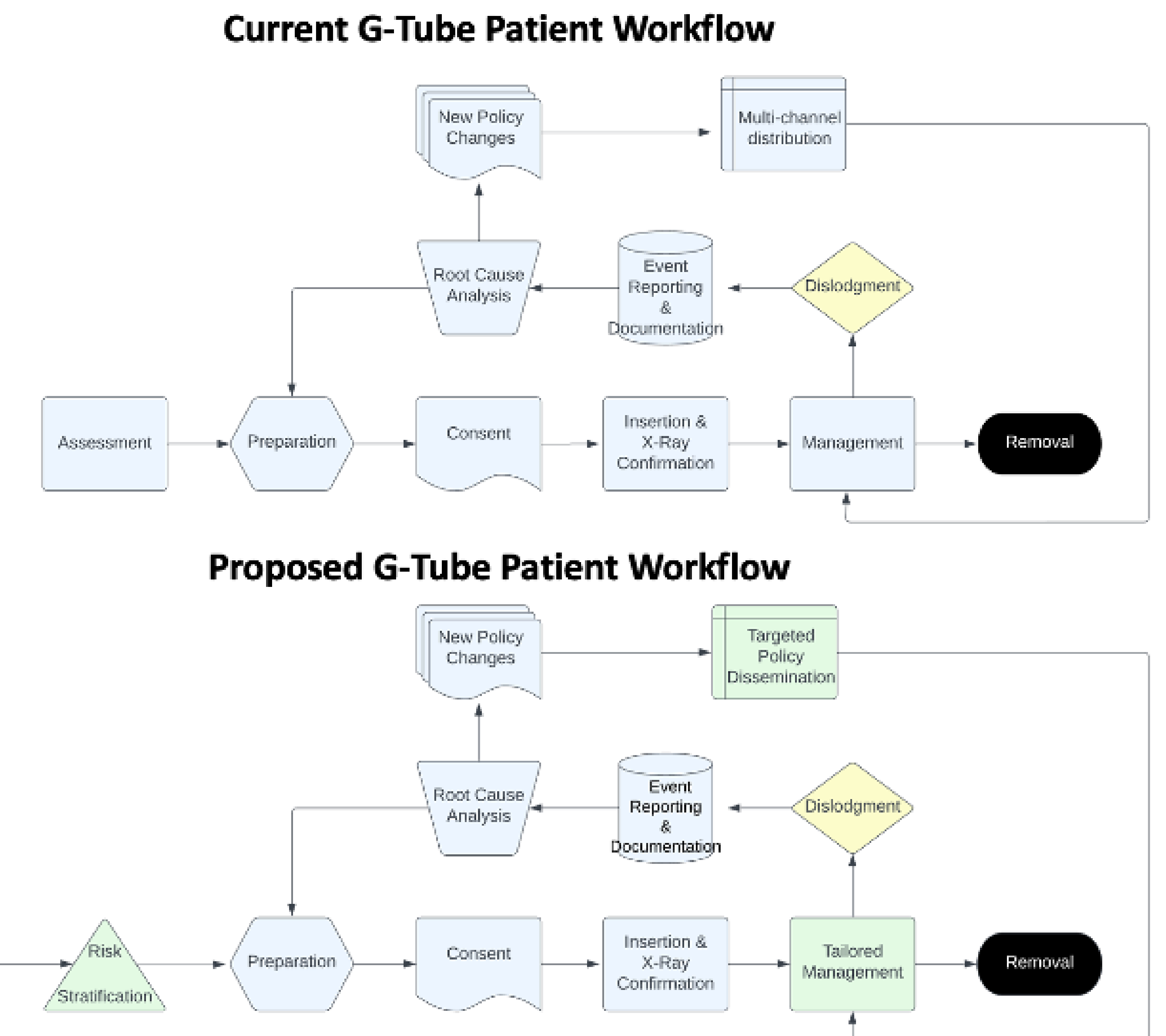


Figure 2. Current and proposed G-tube patient workflow at a large academic tertiary care center.

Conclusion

- This study emphasizes the need for improved gastrostomy tube care and effective policy dissemination methods at a large academic tertiary care center.
- Incorporating risk stratification into the g-tube workflow and tailoring maintenance plans based on dislodgment likelihood can enhance patient safety and mitigate complications.
- Adopting brief, targeted communication strategies and designating a policy educator role within hospital units can improve policy dissemination and understanding, leading to better patient outcomes.
- Further research is needed to evaluate the effectiveness of these proposed changes and explore standardized scoring models for assessing patient safety concerning gastrostomy tubes.