

Emergency and Transport Tracheostomy Supplies: A Quality Improvement Project

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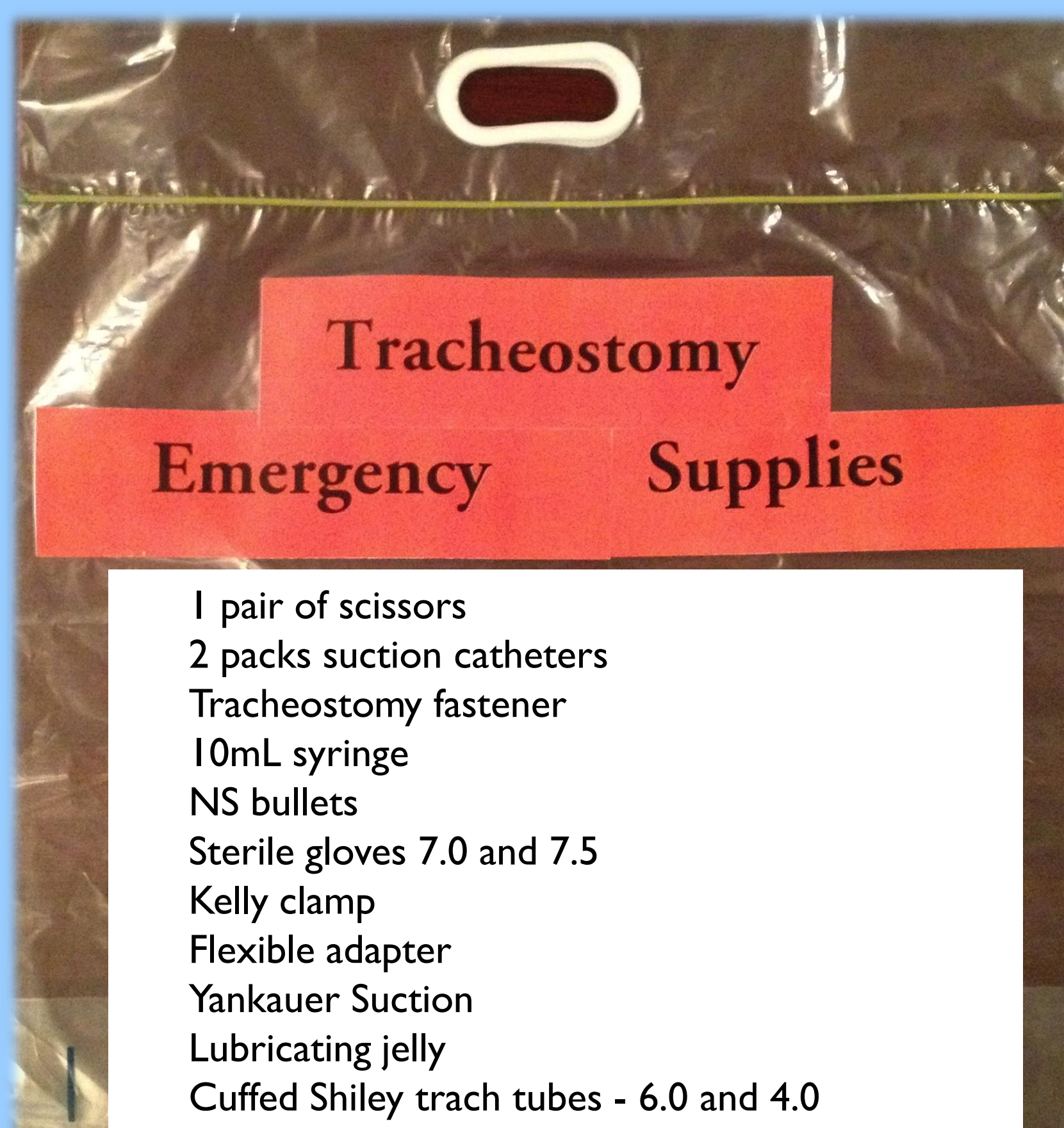
BACKGROUND

- 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
- Purpose:
 - Streamline the process of keeping tracheostomy emergency supplies at the bedside
 - Ensure the availability of supplies during transport to other areas of the hospital

METHODS

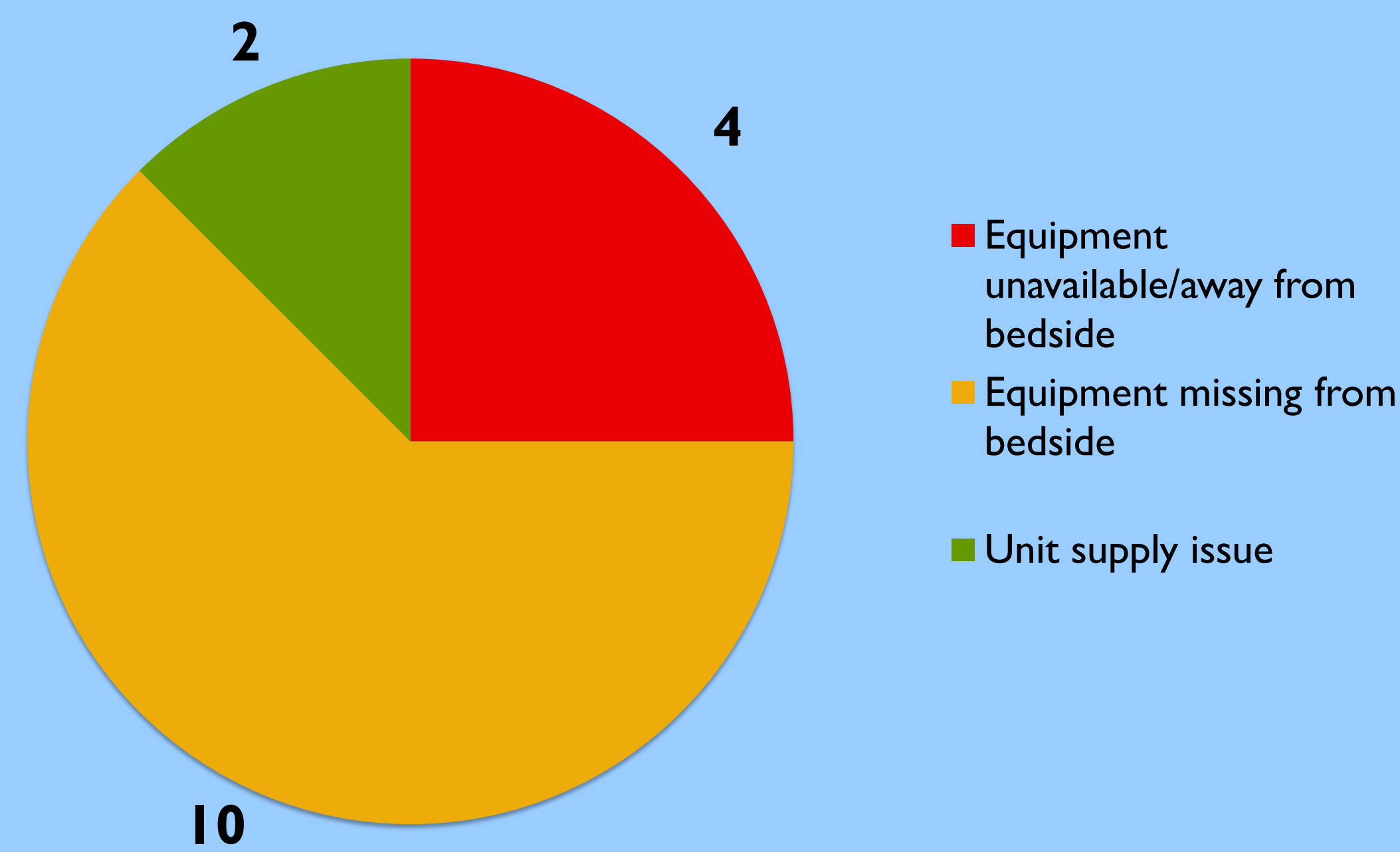
- Four phases:
 - Phase I: Retrospectively reviewed Patient Safety Net (PSN) reporting system of adverse events
 - Phase II: Reviewed patient charts to identify the number of times a tracheostomy patient was transported away from bedside over a period of one month
 - Phase III: Intervention:
 - Informed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

Tracheostomy Supplies Bag and Packing List

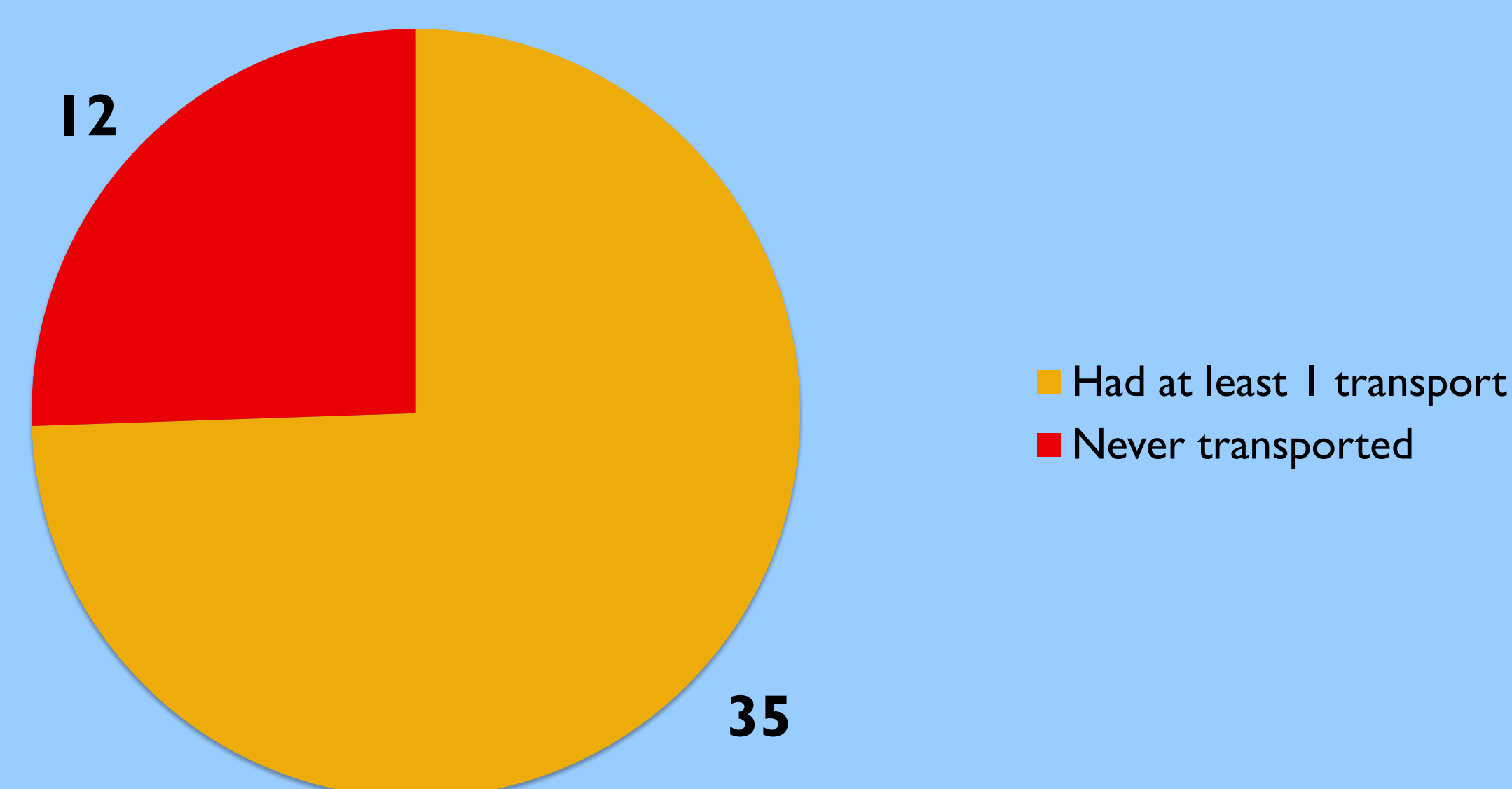


RESULTS

Identified Cause of Patient Safety Event



Transports of Patients with Tracheostomy



Flyer for Tracheostomy Supply Bag Pilot



Questions	Responses	Frequency (%)
Did you find the tracheostomy bag beneficial?	Yes	14 (93)
How is it beneficial?	Helpful	6 (40)
	Convenient	4 (27)
	Easy to use	2 (13)
What triggered you to retrieve the tracheostomy bag?	Policy	4 (27)
	Orange label	2 (13)
	Signage	2 (13)
What are the primary reasons to use tracheostomy bag?	In case of emergency	7 (47)
	Safety	7 (47)
	Consistency	2 (13)
Do you believe that think that this standardized system improves patient safety?	Yes	15 (100)
What recommendations or changes would you suggest to improve the process?	Seal the bags	4 (27)
	Better signage/reminders	3 (20)
	Stock in Pyxis	2 (13)

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

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