Decrease in Accidental Tracheal Decannulations in Chronically Ill Children with Complex Medical Needs in an Inpatient Rehabilitation Facility

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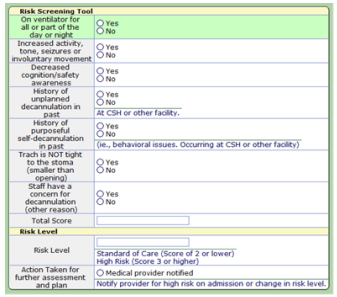
Background

Accidental Decannulation (AD) has serious consequences of morbidity and mortality. Initial work to decrease ADs in our inpatient rehabilitation hospital resulted in a significant decrease in events. However, these results were not sustained and a serious safety event led to the reinvigoration of the Tracheostomy Task Force to identify gaps and make improvements to reduce AD's.

Objective

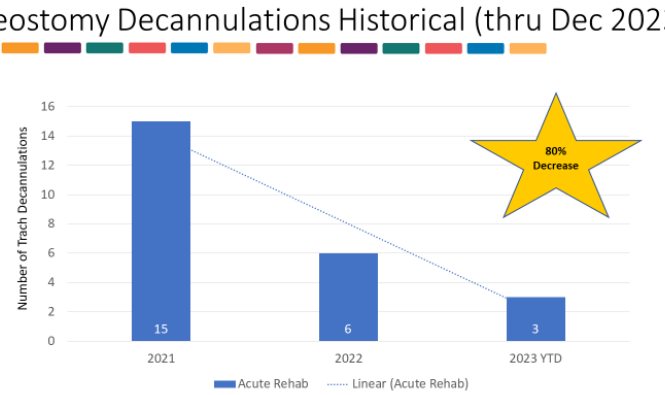
To collect, analyze data and develop strategies to decrease AD events. We present the tools, data and targeted interventions used to achieve decline in AD events.

High Risk Screening Tool



Risk Screening Tool	
On ventilator for all or part of the day or night	○ Yes ○ No
Increased activity, tone, seizures or involuntary movement	○ Yes ○ No
Decreased cognition/safety awareness	○ Yes ○ No
History of unplanned decannulation in past	○ Yes ○ No At CSH or other facility.
History of purposeful self-decannulation in past	○ Yes ○ No (ie., behavioral issues. Occurring at CSH or other facility)
Trach is NOT tight to the stoma (smaller than opening)	○ Yes ○ No
Staff have a concern for decannulation (other reason)	○ Yes ○ No
Total Score	
Risk Level	
Risk Level	Standard of Care (Score of 2 or lower) High Risk (Score 3 or higher)
Action Taken for further assessment and plan	○ Medical provider notified Notify provider for high risk on admission or change in risk level.

Results



Overall accidental decannulation events have decreased **by 80%** over the past 3 years (2021 (n=15), 2022 (n=6) and 2023 (n=3). Additional safety measures implemented included development of high-risk reduction strategies. Reduction in AD's was highlighted as an organizational goal with increased focus at unit safety huddles, monthly leadership review of data, and leader rounding as well as presentation to the Board of Trustees.

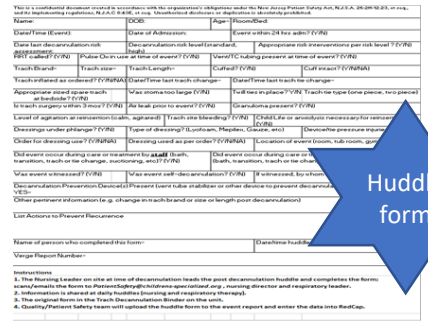
Methodology

- Trach Task Force team conducted a literature review
- A post trach decannulation huddle form was implemented to identify gaps and additional interventions to prevent recurrence
- A Trach Decannulation Risk screening tool was developed to identify patients at higher risk of decannulation
- Specific interventions for those identified as high-risk (e.g. trach stabilizer)

Conclusion

Although initial efforts proved successful in decreasing accidental decannulations, a recurrence of increased events and a serious safety event led us to reexamine AD. Continuous attention on identifying gaps, hardwiring interventions and building accountability, collecting data, and elevating focus across the organization has enabled us to achieve two years of declining ADs.

Huddle form



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