

Title:

Eliminating Harm: Chronic Pediatric Ventilated Care

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Session Title:

Pediatric Chronic Conditions

Slot:

C 06: Sunday, 29 October 2017: 10:45 AM-11:30 AM

Scheduled Time:

10:45 AM

Keywords:

Complex discharge planning, chronic ventilated care and pediatrics

References:

Dumas, H. (2012). Rehabilitation considerations for children dependent on long-term mechanical ventilation. *International Scholarly Research Notices*, <http://dx.doi.org/10.5402/2012/756103>

Moore, P. E., Boyer, D., O'Connor, M. G., Baker, C. D., Rettig, J. S., Stemi, L., . . . Thomson, C. C. (2016). Pediatric chronic home invasive ventilation. *Annals of the American Thoracic Society*, *13*(7), 1170-1172.

Preutthipan, A., Nugboon, M., Chaisupamongkollarp, T., Kuptanon, T., Kamalaporn, H., & Leejakpai, A. (2014). An economic approach for children with chronic ventilation support. *Current Pediatric Reports*, *2*(1), 1-8.

Sterni, L. M., Collaco, J. M., Baker, C. D., Carroll, J. L., Sharma, G. D., Brozek, J. L., . . . Halbower, A. C. (2016). An official american thoracic society clinical practice guideline: Pediatric chronic home invasive ventilation. *American Journal of Respiratory and Critical Care Medicine*, *193*(8), <http://dx.doi.org/10.1164/rccm.201602-0276ST>

Abstract Summary:

The Pediatric Intensive Care team developed a program for chronic pediatric ventilated patients including a consistent nurse staffing plan and dedicated four-bed unit. Median length of stay decreased from 55.2 days to 37.8 days. Catastrophic trach events post discharge decreased from 3 events in 2015 to 0 events in 2016.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to understand complexity of care for pediatric chronic ventilated patients.	Characteristics of inpatient care for pediatric chronic ventilated patients will be presented.
The learner will be able to verbalize best practices for complex discharge planning of chronic ventilated patients.	Discharge planning and education for complex patients will be discussed in this presentation.

Abstract Text:

Purpose and Significance: The Pediatric Intensive Care team developed an inclusive program for chronic pediatric ventilated patients to decrease length of stay, decrease catastrophic trach events post discharge, improve the educational process delivered to families and improve nursing engagement within the PICU nursing team. In August 2014 the chronic pediatric ventilated patient population was integrated into the PICU. The experienced nursing staff found delivering excellent patient care to this patient population challenging due to a lack of training for chronic care delivery. Medical teams reported dissatisfaction due to the variation of nursing expertise with chronic care and training abilities. Parents of ventilated patients received inconsistent discharge education and experienced delayed hospital discharges.

Literature Review: Care of the pediatric chronic ventilated patient requires complex considerations. Standardized hospital discharge criteria are suggested with at least two family caregivers trained specifically for the child's care (Sterni et al., 2016). Inpatient teams identify the following four requirements of complex discharge planning; the child's medical stability for discharge, the family's preparedness for providing care in the home environment, acquiring necessary medical equipment and safety of the home environment (Moore et al., 2016). Integrating activities of daily living for complex pediatric patients is a significant means to support discharge planning. With chronic ventilated infants, activities of daily living in the hospital environment include play time and feeding during the traditional daytime hours (Dumas, 2012). Creating the home environment within the hospital setting is key in preparing chronic ventilated patient for potential discharge. Ongoing assessment and interventions from home health nurses or case managers post discharge promotes health of the chronic ventilated patient (Preutthipan, 2014).

Strategy and Implementation: A multidisciplinary team identified patient care gaps between the chronic care trained nurses and the critical care trained nurses in a program analysis. Several patient care gaps/nursing practice gaps were noted during the analysis; confidence in providing chronic care discharge education, adequate discharge education delivered to caregivers, location of designated beds for chronic patients and satisfaction in caring for chronic ventilated patients. The nursing team (n=102) was given a survey to analyze suspected gaps. A staffing plan of dedicated nurses for this program was implemented to improve confidence in delivering discharge education and increase engagement. A four-bed unit was designated for the program to support a consistent environment of care for this patient population. This home like environment was created in the 36 bed PICU to simulate the home setting and activities of daily care.

Evaluation/Outcome: Median length of stay decreased from 55.2 days in 2014, 38.2 days in 2015, to 37.8 days in 2016. Catastrophic trach events post discharge decreased from 3 events in 2015 to 0 events in 2016. This is a significant reduction in harm.

Implications for Practice: A program model exists for pediatric chronic ventilated patient population. Consistently utilizing a dedicated team of trained nurses has decreased length of stay and decreased harm. Chronic patients receive education that aligns with a coordinated plan for transition from hospital to home care.