2017

Pre-Implementation of a Fontan Post-Operative Clinical Pathway: Summary of 2016 PDSA Cycles

Sarah M. Lagergren  
Children's Mercy Hospital, smlagergren@cmh.edu

Bryan Beaven  
Children's Mercy Hospital, bjbeaven@cmh.edu

Suma Goudar  
Children's Mercy Hospital, spgoudar@cmh.edu

Megan Jensen  
Children's Mercy Hospital, mejensen@cmh.edu

Follow this and additional works at: https://scholarlyexchange.childrensmercy.org/posters

Part of the Cardiology Commons, Critical Care Commons, Critical Care Nursing Commons, Pediatric Nursing Commons, Pediatrics Commons, and the Perioperative, Operating Room and Surgical Nursing Commons

Recommended Citation
https://scholarlyexchange.childrensmercy.org/posters/6

This Book is brought to you for free and open access by SHARE @ Children's Mercy. It has been accepted for inclusion in Posters by an authorized administrator of SHARE @ Children's Mercy. For more information, please contact bpfannenstiel@cmh.edu.
Pre-Implementation of a Fontan Post-Operative Clinical Pathway: Summary of 2016 PDSA Cycles

Sarah Lagergren; Bryan Beaven; Suma Goudar; Megan Jensen

*Children’s Mercy Kansas City, Kansas City, Mo.*

**Background**

Post-operative hospitalization for the Fontan repair tends to have an extended hospital length of stay (LOS). From 2013-2014, the average LOS at Children’s Mercy for the Fontan repair is 14 days, whereas the U.S. national average is 11 days (Dean et al., 2011).

Post-operative management of this patient population is often caregiver dependent. It has been theorized that developing a more standardized post-operative management regimen tailored specifically toward the unique physiology of Fontan patients may be able to improve outcomes and decrease LOS (Cava et al., 2005).

**Methods**

A review of literature was performed and revealed three pediatric institutions in the U.S. have published their post-operative Fontan care guidelines (Cava et al., 2005; Pike et al., 2015; Sunstrom et al., 2014). Common elements from these care guidelines were identified and then trialed in 2016 on our post-operative Fontan population. Three patients were included in three individual PDSA cycles. Adherence to each intervention was tracked and information gathered regarding potential issues.

**Results**

Use of supplemental oxygen prior to chest drainage tube removal had 100% adherence and no harm or negative side effects (e.g. nosebleeds, impeding ability to ambulate) reported. Following a low-fat diet has 100% adherence but the restriction of fluids component had 33% adherence with IV fluids started or IV fluid boluses given over the 80% fluid restriction in 2/3 patients. Following a standardized diuretic regimen had 100% adherence with no negative patient outcomes. Obtaining central access within 48 hours post-operatively via a PICC line had 100% adherence.

**Conclusion**

By performing individual PDSA cycles, potential areas of concern were able to be identified and addressed or disproved. The Fontan clinical pathway was fully implemented in 2017 with plans to complete another full PDSA cycle.

**References**