Improving the nutritional status of neonates following cardiac intervention, an ongoing quality improvement initiative

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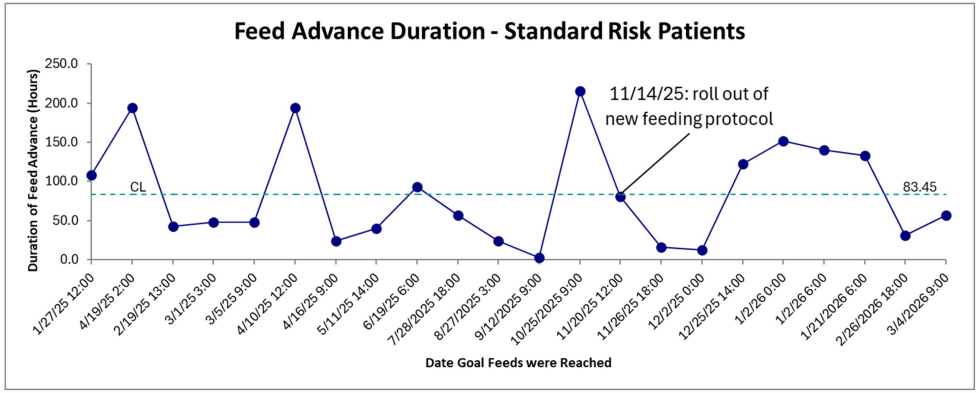
Background

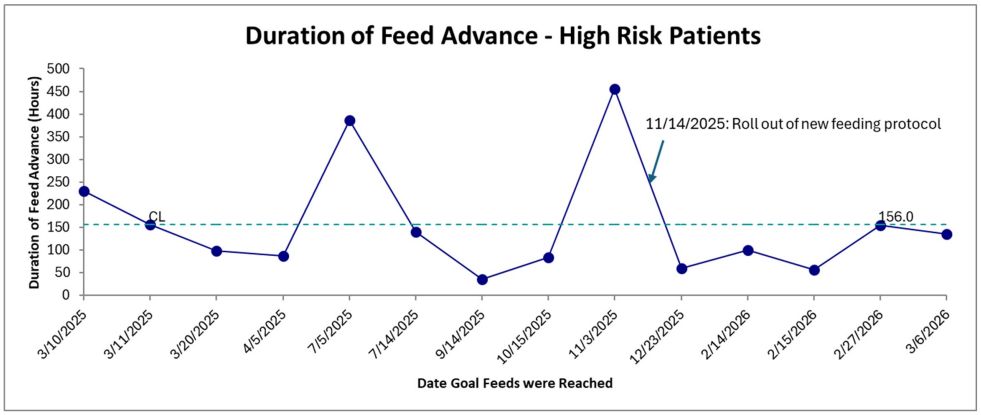
- Infants with CHD have difficulties with feeding and growth related to their underlying cardiac physiology and early interventions required for their CHD
- Standardization of feeding protocols has been shown to improve time to reach goal feeds, decrease avoidable interruptions in delivery of nutrition and decrease hospital LOS in infants with CHD
- Institutional PAC3 data has shown fewer infants receiving enteral nutrition at the start of acute care encounter, longer acute care and hospital LOS and higher rates of malnutrition at the end of the acute care encounter for this population
- Institutional feeding protocols have existed but were rarely utilized, outdated and difficult to navigate

Methods

- Existing feeding protocols were revised with an emphasis on ease of navigation and faster advance to allow patients to reach full feeds sooner
- Duration of feed advance was collected as the primary outcome measure, with feeding intolerance, necrotizing enterocolitis and hematochezia during the advance as balancing measures
- PDSA cycles focused on nursing education

Results





Feeding initiated on Acute Care Unit	2/15 (13%)
Feeding protocol followed for entirety of advance	4/15 (27%)
Feeding intolerance during feed advance	1/15 (6%)
Hematochezia during feed advance	0/15 (0%)
Necrotizing enterocolitis during feed advance	0/15 (0%)

Conclusions

- Good adherence to the feeding protocol when utilized on acute care
  - Many patients started on feeds in CICU are transitioned to appropriate feeding protocol upon transfer
- No episodes of hematochezia or necrotizing enterocolitis with implementation of the new feeding protocol
- Adherence to feeding protocol in the CICU remains variable
- Current PDSA cycles are focused on improving protocol adherence in the CICU

Authors have no relevant disclosures.