The Development of a Comprehensive Pediatric Enhanced Recovery After Surgery (ERAS) Program Utilizing a Pathway Development Team

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Background

- ERAS pathways are increasingly adopted in pediatric care.
- Their development and maintenance require significant time and effort, which can discourage physicians.
- The Evidence Based Practice Department accelerates this process by streamlining pathway development and facilitating implementation.

Aims

- Minimize care variation and improve outcomes from pre-operative care through discharge.
- Optimize pre-operative nutrition and metabolism, reduce medication side effects, and shorten hospital stay.
- Foster evidence-based collaboration and standardize surgical care to achieve optimal patient outcomes.

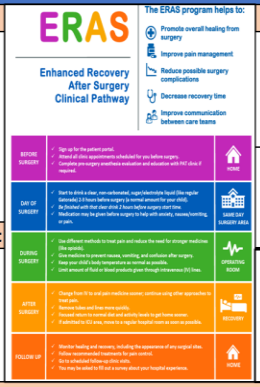
Comprehensive Enhanced Recovery After Surgery Dashboard

Current Pathways (14):

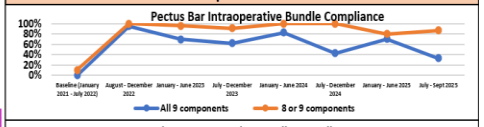
Gastric Sleeve	Cardiac Surgery
Complex Urology	Pectus Bar
Colorectal	Sports Medicine
Cleft Palate	Endometriosis
Complex Ortho	Idiopathic Spine
NM Scoliosis	Amputation
Periacetabular Osteotomy	
IBD	

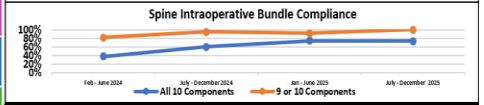
Opportunities for Improvement

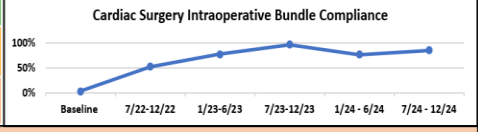
- Increasing carbohydrate loading
- Decreasing NPO times
- Partnership with ICU
- Macro Development
- Transition to new EMR
- Engaging new service lines



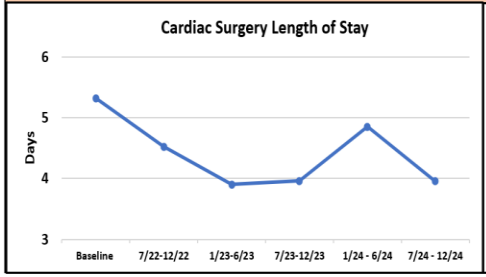
Selected Compliance Metrics:

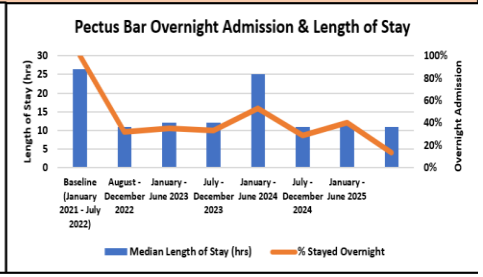






Selected Outcome Metrics:





Methods

- ERAS pathways were co-led by anesthesiology, surgery, and nursing teams across multiple specialties.
- The EBP team oversees pathway development, implementation, monitoring, and public availability on the hospital website.
- Monthly compliance and outcome reviews track pathway performance and drive continuous improvement.

Results

Bundle Compliance

- Pectus bar insertion: 100% compliance for 8/9 components and 25% for all 9 components
- Spine surgery: 82% compliance for 9/10 components and 38% for all 10 components
- Cardiac surgery: 84% compliance across all components

Overnight admission

- Pectus bar: 50% vs 100% at baseline

Decreased length of stay

- Cardiac surgery: 3.9 days vs 5.3 days at baseline

Conclusions

- 14 pediatric ERAS pathways implemented through a collaborative approach
- Uniform metrics used across pathways demonstrated positive patient outcomes
- Strengthened and expanded ERAS programs for continued growth

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