Quality Quarterly
Pediatric Surgery Quality Collaborative Newsletter

Terry and I have launched this newsletter to keep you informed about our quality improvement projects and provide updates on what is going on in the collaborative. We will also be providing updates from member hospitals on where they are in their quality improvement journey. Please feel free to share this newsletter with any colleagues or contacts who may be interested in the information provided. If you would be interested in providing information/sharing in a success (or failure!) story from your hospital, let us know.

As you know, the PSQC is a quality improvement initiative currently comprised of children’s hospitals in the U.S. We have 42 members as of this writing. We initiated our first project, reduction of CT use in patients who present with suspected appendicitis, in October. Our Implementation Committee Chair, Dr. Mehul Raval, shares more on page 2. We continue to explore other areas of interest to our members for a quality improvement assessment as well as those areas highlighted as needing improvement from the ACS NSQIP Pediatric SAR. We have recently launched a small workgroup exploring the potential for a comparative review of gastrostomy use and complications at our member hospitals with a focus on enteral feeding practice variation. If we launch a broader project on that, we will certainly engage everyone. Also, if there are other projects that could be done using the NSQIP platform, do feel free to reach out.

Thank you for your continued involvement in the PSQC. We would like to hear from you about projects that may be of interest to your hospital and which make use of the NSQIP data we all contribute.

Kevin Lally, MD, MS, FACS
PSQC Executive Director
Surgeon-in-Chief, Children’s Memorial Hermann Hospital
Houston, TX
Paul Batalden and Frank Davidoff define quality improvement in healthcare as “the combined and unceasing efforts of everyone—healthcare professionals, patients and their families, researchers, payers, planners and educators—to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning).”
I would like to recognize the members of the IC listed below and thank each of them for their time and commitment to the PSQC. Thank you all for your continued interest in our unique community.

If you have any questions or comments, please reach out to PSQC Program Manager, Terry Fisher at terry.fisher@uth.tmc.edu.

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Chair PSQC Implementation Committee
Associate Professor of Surgery and Pediatrics
Lurie Children’s Hospital

**PSQC Implementation Committee Members**

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Associate Professor of Surgery and Pediatrics
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**KuoJen Tsao, MD, FACS, FAAP**
Professor and Chief, Pediatric Surgery
Children’s Memorial Hermann Hospital

**Cheryl Utendale, MBA, BSN**
Surgical Clinical Reviewer
Phoenix Children’s Hospital
Member Stories

Please share with us any stories you’d like highlighted in this newsletter. Stories which describe the work being done on Quality Improvement at your institution can offer insights for others.

These insights might include advice on team composition; frequency of feedback; best methods for PDSAs; or common challenges and vetted solutions to implementing change.

We are especially interested in hearing about projects which are interdisciplinary and touch several areas within your hospital.

Recent Publications of Interest

**Implementation of a gastrostomy care bundle reduces dislodgements and length of stay**

Pediatric gastrostomy tubes (G-tubes) are associated with considerable utilization of healthcare resources. G-tube dislodgement can result in tract disruption and abdominal sepsis. The team found that an interdisciplinary team using quality improvement science methodology can significantly reduce G-tube dislodgement and improve value after pediatric gastrostomy tube insertion.

**Reducing resource utilization for patients with uncomplicated appendicitis through use of same-day discharge and elimination of postoperative antibiotics**

A prospective study of efficacy of a management pathway for patients undergoing appendectomy for uncomplicated acute appendicitis. The pathway included a same day discharge route with no postoperative antibiotics for patients with gangrenous appendicitis. The study found a significant decrease in LOS with no increase in postoperative complications, such as superficial SSI and OS/SSI.

**Button Gastrostomy Tubes for Pediatric Patients: A Tertiary Care Center Experience**

A retrospective cross-sectional descriptive study in a nascent pediatric surgery service. In Bahrain. Neurological disorders are the main diagnosis for the cases operated upon. Laparotomy with gastrostomy is the procedure of choice at our center. Majority of patients had no reported complications of button tube replacement. These children are likely to benefit from the button tube with fewer complications.

**Impact of an institution-designed algorithm for the management of dislodged gastrostomy tubes**

A treatment study of pediatric patients presenting to the ED for GT dislodgment at a single institution. An algorithm for replacement of dislodged GT is usable, effective, and increased surgical team involvement without significant changes in patient outcomes.

**Minimizing Variance in Gastrochisis Management Leads to Earlier Full Feeds in Delayed Closure**

For infants undergoing delayed closure, the time to full feeds in this group now appears to match that of patients undergoing primary closure, indicating that delayed closure should not be a reason for slower advancement. Additional studies are needed to assess the impact of earlier full enteral nutrition on rare complications and rates of necrotizing enterocolitis.
As part of the NSQIP antibiotic stewardship pilot program, Cincinnati Children’s discovered high noncompliance with SAC modified guidelines. They started their QI project with a focus on g-tube cases. The Aim statement developed by Cincinnati in July 2019 was “to increase the proportion of G-tube patients receiving correct Surgical Antibiotic Prophylaxis (SAP) for indication, timing, spectrum, and duration according to national and pediatric specific guidelines from 17.2% to 80% by 12.31.20”.

Some interventions adopted were an updated order set for g-tubes, moving all SAP except Vancomycin into the intraoperative phase of care and an automated weight based dosing within the order set. The order set for g-tubes was launched December 1, 2020. The PDSA cycle is indicating the desired increase in adoption to date. The project is continuing.

For more information, please contact Susan Duncan, NSQIP Clinical Registry Reviewer, at Susan.Duncan@cchmc.org.

In September of 2019, Phoenix Children’s Hospital’s (PCH) NSQIP-P staff, embarked on an inter-rater reliability (IRR) process as a quality assurance project around data entered into NSQIP-P. The project was designed to validate data entered by the two SCRs at PCH into the ACS NSQIP-P database. Prior to the project implementation, there was no formal approach to assuring the two abstractors were using a consistent interpretation of the case worksheets variables.

The project included 11 NSQIP cycles and found a high rate of IRR. One area of dissonance was in classification of SSIs.

The IRR team presented their findings at the ACS Quality and Safety Conference in July 2020. You can review a copy of their accepted poster in the attachments tab of this newsletter. For additional information, please contact Cheryl Utendale, Surgical Clinical Reviewer, at cutendale@phoenixchildrens.com.

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