Pediatric Surgery Quality Collaborative

April 18, 2023
Updates from PSQC

- On going Projects
  - Post-op CT reduction

- PSQC SAR
  - Data challenge
Pilot Projects

- User guide for creating custom variables for projects
- Operations manual for each custom variable
- Data submission for all three (3) projects the same
Pilot Projects-Opioid Stewardship

- 35 Hospitals expressed interest
- 21 Have completed DUAs

Phase I
- No custom fields necessary
- Will require collection of all six (6) variables in NSQIP
  - The two (2) currently required and the four (4) currently optional
Pilot Projects-Antibiotic Duration Post-Complicated Appy

- Modeled on STOP-IT Trial
- 33 Hospitals expressed interest
- 19 Have completed DUAs
- Standardized protocol
Pilot Projects-Antibiotic Duration Post-Complicated Appy

- Four (4) custom variables
  - Total number of calendar days of antibiotic(s) after surgery
  - Total number of calendar days of oral antibiotic
  - Discharge antibiotic name
  - IV antibiotic name
Pilot Projects-Antibiotic Duration
Post-Complicated Appy

- Only currently abstracted complicated appy cases included
- Using NSQIP definition of complicated appy
- Standardized antibiotic protocol for post appendectomy of complicated appendicitis
  - Protocol is drafted-needs review by workgroup
  - Each pilot hospital will be asked to implement this protocol
  - Follow-up will be needed to mark date of protocol implementation
  - Data can be collected prior to implementation of protocol
Pilot Projects-Colorectal Bundle

- Modeled on Western Pediatric Surgery Research Consortium (WPSRC) findings

- 19 Hospitals expressed interest

- 15 Have completed DUAs
### Intestinal procedures with anastomosis by CPT code

**INCLUDING ALL COLORECTAL PROcedures WITH INTRA-ABDOMINAL ANASTOMOSIS AND ABDOMINAL CLOSURE**

<table>
<thead>
<tr>
<th>CPT code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>44140</td>
<td>Colectomy, partial; with anastomosis</td>
</tr>
<tr>
<td>44143</td>
<td>Partial removal of colon</td>
</tr>
<tr>
<td>44144</td>
<td>Partial removal of colon</td>
</tr>
<tr>
<td>44145</td>
<td>Colectomy, partial; with coloproctostomy (low pelvic anastomosis)</td>
</tr>
<tr>
<td>44146</td>
<td>Colectomy, partial; with coloproctostomy (low pelvic anastomosis), with colostomy</td>
</tr>
<tr>
<td>44147</td>
<td>Colectomy, partial; abdominal and transanal approach</td>
</tr>
<tr>
<td>44150</td>
<td>Colectomy, total, abdominal, without proctectomy, with ileostomy or ileoproctostomy</td>
</tr>
<tr>
<td>44160</td>
<td>Colectomy, partial, with removal of terminal ileum with ileostomy</td>
</tr>
<tr>
<td>44205</td>
<td>Laparoscopy, surgical; colectomy, partial, with removal of terminal ileum with ileostomy</td>
</tr>
<tr>
<td>44207</td>
<td>Laparoscopy, surgical; colectomy, partial, with anastomosis, with coloproctostomy (low pelvic anastomosis)</td>
</tr>
<tr>
<td>44208</td>
<td>Laparoscopy, surgical; colectomy, partial, with anastomosis, with coloproctostomy (low pelvic anastomosis) with colostomy</td>
</tr>
<tr>
<td>44227</td>
<td>Laparoscopy, surgical, closure of enterostomy, large or small intestine, with resection and anastomosis</td>
</tr>
<tr>
<td>44604</td>
<td>Suture repair large intestine, without colostomy</td>
</tr>
<tr>
<td>44615</td>
<td>Intestinal stricturoplasty (enterotomy and enterorrhaphy) with or without dilation, for intestinal obstruction</td>
</tr>
<tr>
<td>44620</td>
<td>Closure of enterostomy, large or small intestine;</td>
</tr>
<tr>
<td>44625</td>
<td>Closure of enterostomy, large or small intestine; with resection and anastomosis other than colorectal</td>
</tr>
<tr>
<td>44626</td>
<td>Closure of enterostomy, large or small intestine; with resection and colorectal anastomosis (eg, closure of Hartmann type procedure)</td>
</tr>
<tr>
<td>44640</td>
<td>Closure of intestinal colonic fistula</td>
</tr>
<tr>
<td>44650</td>
<td>Closure of enterovesicular fistula, without intestinal resection</td>
</tr>
<tr>
<td>44651</td>
<td>Proctectomy, partial resection of rectum, transanal approach</td>
</tr>
<tr>
<td>44514</td>
<td>Proctectomy, partial, with anastomosis; abdominal and transanal approach</td>
</tr>
<tr>
<td>45402</td>
<td>Laparoscopic surgical proctopectomy with sigmoid resection for prolapse</td>
</tr>
<tr>
<td>45590</td>
<td>Open proctopectomy for prolapse w sigmoid colon resection</td>
</tr>
<tr>
<td>45800</td>
<td>Closure of rectovesicular fistula</td>
</tr>
</tbody>
</table>
**Pilot Projects-Colorectal Bundle**

### COLON BUNDLE PROTOCOL CHECKLIST

**PROCEDURES TO INCLUDE:** All colorectal procedures WITH anastomosis and abdominal closure

#### Preoperative

- Bowel prep (Optional)
- *(Optional)* Chlorhexidine (SAGE) bath/wipes
- Umbilical cleansing (alcohol cleaning of umbilicus prior to skin prep)
- Preoperative antibiotic given within 1 hour of incision

#### Intraoperative (Document in operative report)

- Anastomotic leak test
- Dedicated closure tray and drapes prior to closure *ok to use new sterile towels instead of new drapes
- Glove change prior to closure
- *(Optional)* Placement of subcutaneous drain in grossly contaminated cases
- Drain can be: vessel loop, penrose, umbilical tape, or other wicking object
- Maintenance of normothermia (< 36°C or > 38°C for less than 30 minutes)

#### Postoperative

- Perioperative antibiotics discontinued at 24 hours (unless clinically indicated for longer duration)
- If present, occlusive dressing removed at 48 hours to examine wound

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**Children's Memorial Hermann Hospital**  
**UTHealth McGovern Medical School**
Pilot Projects-Colorectal Bundle

- Eleven (11) custom variables
  - Eight (8) required, three (3) optional
    - Bowel prep (optional)
    - Chlorhexidine bath (optional)
    - Umbilical cleansing
    - Preoperative antibiotic within 1 hour of incision
    - Anastomotic leak test
    - Dedicated closure tray
    - Glove change prior to closure
    - Placement of subq drain (optional)
    - Maintenance of normothermia
    - Periop antibiotics discontinued at 24 hours
    - Occlusive dressing removal at 48 hours
Custom Field programming guide for PSQC-Peds Colorectal Bundle QI Project

Starting at the Home Page of the NSQIP-Peds ACS Data Quality Platform, click on:

- Form Management, then
- Custom Fields, then
- Case Form, then
- Create New (at red arrow)
The new Case Form page will appear as shown below. Custom Field Variables will appear in the Workstation in the order that they were programmed. Red font indicates required fields.
In the “Display Label” box in the new case form type in verbatim **Colo Bowel Preparation (optional)**. It will turn from red to black on being completed.
In the “Field Name” box in the new case form type in verbatim \texttt{colo\_bowelprep}. It will turn from red to black on being completed.
In the new case form, under “Field Type”, choose “Single Select > Radio Button”.

None of the other black fields need to be filled out for this variable.
Scroll to “Manage Codes” in new case form.
In the “Manage Codes” section, in box that says “Type to add new option”, type Yes.

Click “Add Codes” on right of screen.

Type No in next box that says “Type to add new option”.

Once you click out of that box, the “Manage Codes” will turn black, see screenshot below.
• You can change anything until you click “Save” or “Save & Exit”. Once the variable is saved you cannot edit the “Field Name” or the “Field Type”. You can edit the “Display Label” and the entries in “Manage Codes”.

• If you make a mistake and have already saved the variable, as long as the “Field Name” is not the same as a “Field Name” you need to use, you can hide the variable by clicking “Hide on form”. **You can never delete a variable once it is saved as a Custom Field, you can only hide it.**

• Once you have checked that the entries in “Field Name” and “Field Type” are correct, scroll to top of screen and click “Save & Exit” at the bottom right of the screen.
PSQC
Antibiotic Duration
Pilot Project
Variables
Antibiotic Duration post Complicated Appendectomy

Display Name: Appy Total number of calendar days of antibiotic(s) after surgery

Field Name: appy_totaldaysabx

Intent of Variable: To identify how many calendar days an antibiotic was prescribed after skin closure for complicated appendicitis

Definition: Antibiotics are a class of drugs prescribed to prevent or treat an infection. These can be administered parenterally (IV) or enterally (oral, gastric or rectal). Commonly prescribed antibiotics for this indication include, but are not limited to:

- Cephalosporins (cefazolin, cefepime, cefoxitin, cepalexin, cefdinir, etc)
- Fluoroquinolones (ciprofloxacin, levofloxacin)
- Penicillins (Ampicillin-sulbactam, Piperacillin-tazobactam, Amoxicillin-clavulanate)
- Nitroimidazoles (metronidazole)
- Carbenems (ertapenem, meropenem, Imipenem-cilastatin)
- Aminogycoside (gentamicin)
- Lincomycins (clindamycin)
- Azole (fluconazole)

Criteria: Indicate how many calendar days a patient may have received any antibiotic during surgical stay and at discharge. Count antibiotics given post surgical closure on POD 0 as calendar day 1 of antibiotics after surgery

Options:
- Enter the numerical value

Notes:
- Add the number of calendar days patient received IV and PO antibiotics during his/her surgical stay plus total number of calendar days of any antibiotic prescribed at discharge
- If an IV dose is discontinued and oral initiated on same calendar day, count it as an IV day
Pilot Projects-Data Submission Guide

Step 1:
• Sign into NSQIP Registry

Step 2:
• Select “Resource Portal” in left hand navigation pane

Step 3:
• In Resource Portal, Select “Reports”
• Select ‘Case Details & Custom Fields Report’
Step 4: See screenshot below

- Click select ‘ALL’ (will include Targeted Variables and Process Variables)
- Date range end date can be the day you pull the report
Pilot Projects-Data Submission Guide

- Leave all the filter options blank until you get to: Custom Field Inclusion
- Select ‘Only Active’ at bottom of form for custom field inclusion
- Then select ‘submit’
- Your report will be at the bottom of your page as an excel file
- Download this report

In testing, we have found that the report returned does often include all custom fields even when you choose ‘Only Active’. Please be aware of this and clear any dates that might be part of your custom fields.
Step 5:

- Download your excel report and open.
- You will need to clear all PHI content included in form:
  - **DO NOT** delete the column
  - Highlight the column and right click to select:
    - Choose ‘clear contents’ from drop down in Excel.
Pilot Projects-Data Submission Guide

- Most of your custom variables will be displayed after column JK, labeled ‘Contact: Other’.

- A list of the columns in which you must clear contents is included, along with an empty case details report with the PHI columns highlighted to serve as an additional guide.

- Save your file using this format: date downloaded (x.xx.xx); institution name; project name (colo, abxduration, opioid)
  - Ex: 2.28.23.Hermann.Abxduration

- Email the file to the program manager (terry.fisher@uth.tmc.edu) with the email subject line titled: Data Report from (Institution) for (PSQC Project)
  - Ex: Subject: Data Report from Hermann for Abx Duration
Before sending your first data report, schedule a call with the program manager to review the file to assure no PHI has been missed.
Questions

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