Hello everyone and welcome! We really appreciate your continued interest in this collaborative and look forward to getting started. First we will start with a few housekeeping reminders:

1) To reduce the likelihood of feedback during the call, we’ve muted everyone.
2) Please use the chat function to ask questions. We have time at the end of the presentations to respond to any questions submitted during the webinar, and, we’ll open to a Q&A format at the end.
3) The webinar is being recorded. We will post it later and provide a link so you can review or share with any member of your team unable to be on the call. Please frame any questions with the understanding it will be part of the recording.
Meeting Agenda

• Brief update on PSQC (Fisher)
• SSI QI project-Golisano (Levatino)
• NSQIP SSI/OS Variable (Duncan)
• Q&A
• Round Robin

Here is our agenda for today.

1) A broad overview of the PSQC
   1) Growth in membership
   2) Status on CT project

2) SSI/OS QI Project-Golisano
   1) QI process

3) NSQIP SSI/OS variable questions
   1) Clinical guidance

4) NSQIP SSI Occurrence Questions

5) Networking

6) Round Robin
Each webinar will start with a 15 minute presentation from me on PSQC projects (CT utilization reduction right now). In these 15 minutes, I’ll give you an update on:
- who is participating in the QI project;
- what we’ve learned; and
- answer your questions about it.

The next 30 minutes of the webinar will be dedicated to the topic highlighted below. This list will evolve as we identify other areas of interest. In this 30 minutes, the presenters will:
- Introduce you to the topic and its importance in NSQIP data collection;
- Share their QI project(s) approach on the topic;
- Share any tools they developed (as allowed);
- Share their data mining approach; and
- Answer questions

The next 10 minutes will be spent networking. I will facilitate this conversation.
I will ask you to submit networking questions in advance of the meeting;
I will post those questions and then use Poll Everywhere to help elicit
responses;
Open conversation will follow

**We may find we want to make this ‘networking’ time themed as well**

The final 5 minutes will be spent in a round robin opportunity to share what you learned and/or liked about the meeting

I will send a follow-up evaluation to each webinar for you to provide feedback on how it went and offer suggestions for future meetings
New Members

<table>
<thead>
<tr>
<th>State</th>
<th>Hospital Name</th>
<th>City</th>
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</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>Children's Healthcare of Atlanta</td>
<td>Atlanta</td>
</tr>
<tr>
<td></td>
<td>Matthew Clifton</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>Albany Medical Center</td>
<td>Albany</td>
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<tr>
<td></td>
<td>Mary Edwards</td>
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</tr>
<tr>
<td>North Carolina</td>
<td>Arnold Palmer Children's-Donald Plumley</td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>North Carolina Children'-Andrea Hayes</td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td>St. Luke's- Ellen Reynolds</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>Randall Children's- Cynthia Gingalewski</td>
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<tr>
<td>Indiana</td>
<td>Peyton Manning Children's-Evan Kokoska</td>
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</tbody>
</table>
Project roll out April 22. 7 sites have expressed in participating. We will be initiating office hours starting in June. These office hours will be 1x month through the end of 2021.
Future Projects

• Antibiotic stewardship
• GTube complications
• Appy Readmissions
• SSI/OS
• Others.....???

We will be sending out a list of proposed future projects for the PSQC and then ask for rank order voting from all our members. Plan is to launch next project Jan 2022.
PSQC SCR Webinar
Organ Space Infection
QI Project

Elizabeth Levatino, RN BSN
SCR/QAL Pediatric General Surgery
Golisano Children’s Hospital Rochester, NY
QI Project Overview

1. Identify an issue:
   - Review ACS NSQIP SAR (complicated appendectomy OSI)
   - Notice a trend during chart review

2. Validate events:
   - Review event definition, verify cases met criteria in the definition
   - Surgeon Champion (SC) input, clinical support clarifications

3. Assemble multidisciplinary team:
   - SCR, SC, surgeons, NP/PA, infection prevention, pharmacist, any stakeholder
     (Physician leader key to success)

4. Identify data needed to support project:
   - Culture results and antibiotic management not collected in NSQIP
   - Develop a process to collect and store this extra data
QI Project Process Continued

5. Regularly share updates:
   • Adjust data collected
   • Update project based on current data trends

6. Early success:
   • Team engagement, cultures collected

7. Early challenges:
   • Overcoming 'excuses' identified in early stages, identify the opportunity
   • Data collection tool development: easy to collect, able to summarize

8. Outcomes:
   • Decrease in post-op drain placement (OSI)
   • Decrease in readmissions
NSQIP Organ Space SSI Definition

**Intent of Variable:** Identify the occurrence of infection that does not meet the criteria of Superficial Incisional SSI or Deep Incisional SSI. This category of infection is typically the most severe and is more likely to require procedural intervention.

**Definition:** Organ/Space SSI is an infection that involves any part of the anatomy (e.g., organs or spaces), other than the incision, which was opened or manipulated during the primary procedure.
NSQIP Organ Space SSI Definition

Criteria: An infection that occurs within 30 days of the Primary Procedure AND involves any of the anatomy (e.g., organs or spaces), other than the incision, which was opened or manipulated during the primary procedure, including sites integral to the primary procedure AND at least ONE of the following:

• Purulent drainage from a drain that is placed through a stab wound into the organ/space.
• Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space.
• An abscess or other evidence of infection involving the organ/space that is found on direct examination, during reoperation, or by histopathologic or radiologic examination*.
• Diagnosis of an Organ/Space SSI by an Advanced Provider
NSQIP Organ Space SSI Definition
SSI/OS NSQIP

Susan Duncan, MS, BSN, RN-BC
NSQIP Clinical Registry Reviewer
Cincinnati Children's Hospital
Organ/Space SSI

“All art is at once surface and symbol. Those who go beneath the surface do so at their peril.” –Oscar Wilde, The Picture of Dorian Gray
CDC’s National Healthcare Safety Network

• **NSQIP-Pediatric Definition of an Organ/Space SSI**
  – Based on CDC’s [NHSN SSI Source Documentation](#)
  – Operation must take place in an OR as defined by the AIA’s Facilities Guidelines Institute criteria
  – Must be a procedure where at least one incision, including laparoscopic approach or cranial Burr holes, is made through the skin or mucous membrane
  – Date assigned is the date when the first element used to meet criteria occurs for the first time during the surveillance period

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Definition of Operative Procedure found on Page 4

Date assigned is p. 5 – Clarify not the date when all criteria are met, date when **first** criteria is met.
Location in NHSN does not include bedside procedures, only C-section rooms, interventional radiology, and/or cardiac catheterization suites

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Questions for ACS:
1. Does NSQIP report their collected data to the NHSN?
To Scope or Not to Scope

- NHSN has good guidance on whether or not a procedure has utilized a Laparoscopic or Minimally Invasive approach
- The 5th character in the ICD-10-PCS codes indicate if a Laparoscopic/MIS approach was taken:

<table>
<thead>
<tr>
<th>ICD-10 5th Character</th>
<th>Approach</th>
<th>NHSN Scope Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Open</td>
<td>NO</td>
</tr>
<tr>
<td>3</td>
<td>Percutaneous (included only in CRAN and VSHN categories- procedures with Burr holes)</td>
<td>NO</td>
</tr>
<tr>
<td>4</td>
<td>Percutaneous endoscopic</td>
<td>YES</td>
</tr>
<tr>
<td>7</td>
<td>Via natural or artificial opening</td>
<td>NO</td>
</tr>
<tr>
<td>8</td>
<td>Via natural or artificial opening with endoscopic</td>
<td>NO</td>
</tr>
<tr>
<td>F</td>
<td>Via natural or artificial opening with percutaneous endoscopic assistance</td>
<td>YES</td>
</tr>
</tbody>
</table>

NHSN differs from NSQIP in that, if a procedure is coded as open and scope, then the procedure would be reported as NO for scope, because the open designation is considered a higher-risk procedure. CPT code descriptions are where you would find indication for a Laparoscopic/Minimally Invasive approach. i.e., HYST 58570 Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less
NSQIP-Pediatric Definition

• **Intent of Variable:** Identify the occurrence of infection that does not meet the criteria of Superficial Incisional SSI or Deep Incisional SSI. This category of infection is typically the most severe and is more likely to require procedural intervention.

• **Definition:** Organ/Space SSI is an infection that involves any part of the anatomy (e.g., organs or spaces), other than the incision, which was opened or manipulated during the primary procedure.
NHSN vs. NSQIP Organ/Space SSI

**NHSN**
- Surveillance to 90 days
- Involves any part of the body *deeper than the fascial/muscle layers* that is opened or manipulated during the operative procedure
- Organisms identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment

**NSQIP**
- Surveillance to 30 days
- Involves any part of the anatomy *other than the incision* that was opened or manipulated during the Primary Procedure
- Organisms isolated from an *aseptically* obtained culture of fluid or tissue in the organ/space

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TJC delineates 4 chief domains of aseptic technique:

1. Barriers such as sterile gloves, sterile gowns, masks for patient and provider, and sterile drapes
2. Patient and equipment preparation – Cleansing and/or bacteria-killing preparations to the patient’s skin before a procedure
3. Environmental controls such as keeping doors closed during sterile procedures, minimizing presence of unnecessary personnel in the room at the time of the procedure, etc.
4. Contact guidelines – for example, for urethral catheterization, provider will not touch any nonsterile surface with the hand that advances the catheter into the patient’s urethra, using a new, sterile catheter for each attempt of the catheterization
Question 1

Appendectomy patient comes back to ED for abd pain and is readmitted. CT finds fluid collection that is drained by Radiology. Culture obtained and results are “No growth”. IV antibiotics given throughout hospital stay.

Is this an SSI?

My questions:
1. Did the patient go home on IV antibiotics? If not, were the cultures taken at time of readmission taken before or after administration of IV antibiotics?
2. Did CT read indicate abscess formation or just fluid?

Question from Debbie Bennett Children’s Hospital San Antonio
Question 2

I would like more clarification of postop sepsis occurrence assignment, for the case of an uncomplicated appendectomy, that had preop SIRS, who is readmitted with an organ space ssi and sepsis criteria.

Deborah Greer, Inova Fairfax
### Scenario 1
- 3-month-old former 36-week GA infant
- Laryngomalacia s/p supraglottoplasty x2
- Moderate ASD with L → R shunting
- GERD
- Hypotonia/Generalized Weakness
- Presented with acute-on-chronic hypoxemic respiratory failure
- Stridor
- Coughing/choking with NGT feeds
- Poor weight gain with failure to thrive

Deborah Greer, Inova Fairfax
Scenario 1 (continued)

• On POD 16, Pseudomonas speciated from Tracheal Aspirate culture
• No other Tracheal Aspirate cultures had been performed
• Green secretions around trach
• Started inhaled Tobramycin x 10 days
• Organ/Space SSI assigned
• No SIRS criteria noted 48 hours +/- event of SSI
• ACS Clinical Support concurred with assignment

Deborah Greer, Inova Fairfax
Scenario 2

• Primary procedure: Palatoplasty
• Concurrent procedure: EUA and removal of deeply impacted cerumen to BL ears (tubes were intact)
• Otorrhea noted to R ear during ENT procedure
• Ciprodex drops placed BL ears in operative field
• Postop plan was for Ciprodex gtts 4 gtts each ear BID x 7 days
Scenario 2 (continued)

- No issues with palatoplasty
- Patient discharged to home within 24 hours
- Mom called ENT office on POD 7, stated patient pulling at ear and had a fever for last 72 hours
- Stated were giving Ciprodex gtts as prescribed
- Patient taken to OSH UC; no fever there; exam w/BL PETs in place, left ear normal, right ear with right purulent discharge coming from PE tube into external auditory canal – started on Augmentin
Scenario 2 (continued)

- On POD 11, patient had OV with ENT surgeon
- Grandma reported yellow drainage from BL ears
- Stated decreased drainage since starting Augmentin
- Exam documented as ears with PETs in place, clear, and dry with intact palate
- Stopped oral antibiotics based upon exam findings and side effects of rash and diarrhea
- CXR and COVID negative
Scenario 2 (continued)

• Questions sent to Clinical Support:
  – Given proximity of anatomy between palate and eustachian tubes, would an Organ/Space SSI be assigned here?
  – If yes, would the fact that otorrhea was documented as present in the operative report and the patient was placed on Ciprodex gtts x 7 days negate the occurrence?
  – If the surgeon discontinued the oral antibiotics 4 days after patient started taking them, does that influence the assignment of the occurrence in any way?
We’d like to spend the remaining time answering your questions. Please use the raise hand function if you’re on the desk top app. Otherwise, please text me.
Networking
Poll Title: Do not modify the notes in this section to avoid tampering with the Poll Everywhere activity.
More info at polleverywhere.com/support

What areas of your job would you like to connect with others on?
https://www.polleverywhere.com/free_text_polls/UVe7CF9aqWZzKfRnOtZgT
I’ll call on each of you for just a brief check-in.
Poll Title: Do not modify the notes in this section to avoid tampering with the Poll Everywhere activity.
More info at polleverywhere.com/support

Presentation feedback
https://www.polleverywhere.com/surveys/QzNDWntsKJGx6ebLuag4g?flow=Default&onscreen=persist
The slide deck and a link to the recording of this webinar will be forwarded to all as soon as it is available. It will also be posted on our website. I will also be sending out a post presentation survey for you all to complete. Feedback is anonymous. Will help me improve!