

St. Joseph Mercy Hospitals Quality Initiative Project PONV 01

Presented By: Traci Coffman and Jerri Heiter
Date: 07/20/2018



The Sites We Serve



The Sites We Serve

- St. Joseph Mercy Ann Arbor
- St. Joseph Mercy Chelsea
- St. Joseph Mercy Livingston
- St. Joseph Mercy Brighton
- 206 anesthesia providers

What is Quality Improvement?

Quality improvement in regards to our anesthesia practice is a **systematic approach** for **improving performance** so as to reach the **desired clinical outcome**. Our goal then was to maximize compliance with the PONV guidelines our Quality Committee endorsed which corresponded with the ASPIRE PONV 01 measure. As a result of using this guideline we believe our patients will have less PONV.

Our hypothesis

If we could develop a **central** electronic site of access for **all** of our anesthesia providers which housed the **relevant information** regarding our ASPIRE PONV 01 measure and our algorithm for PONV management, we would have better compliance with following the algorithm and, therefore, meet our ASPIRE measure with resultant improvement in our performance. Our goal being >90% compliance with the PONV 01 measure.

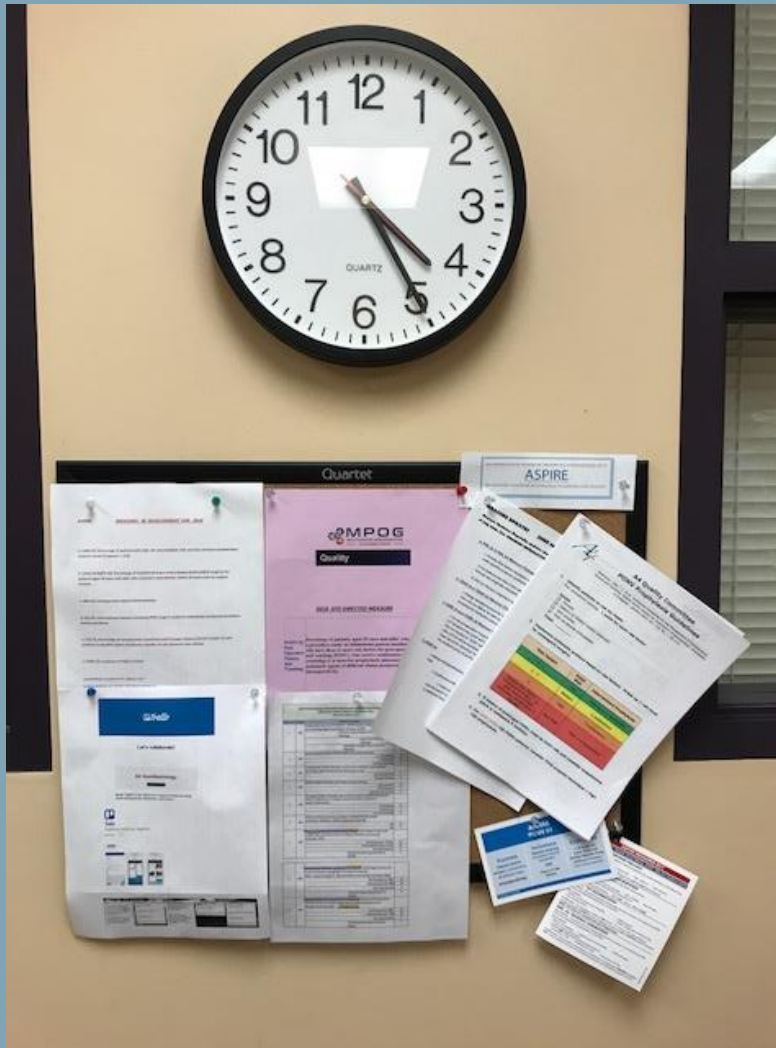
Systematic Approach Part 1

1. Many anesthesia practitioners rely heavily on the internet for access to information including medical information.
2. Almost all of them have smart phones.
3. Access to an internet app that allows our organization to find protocols, guidelines and ASPIRE measures specific to our practice in a single location would be clinically helpful.
4. The portable nature of this information allows practitioners access to it in all the locations where they practice.
5. Information can be added and/or changed easily.
6. Paper is no longer relevant when electronic means of information is available.

Along comes Trello...

- A smart phone app that is FREE
- Works like a substitution for a bulletin board
- Cards, checklists, file attachments can all be created as reference materials
- Single location for comprehensive clinical information
- Designed specifically for our needs (ASPIRE focus measures, PSH checklists, PONV algorithm)

So we are moving from this...



To this... Trello

Boards Anesthesiology A4 Anesthesiologists Team View TC BH KE OA A 158 Show Menu

- PONV**
 - 1. Identify ADULT patients at risk for PONV Pre- procedure scoring, 1 point for each risk factor : ♀ Female 🟢 Hx of PONV/ motion sickness 🚫 Non-smoker 🍷 Post-op opioids anticipated Total: _____
 - 2. Implement antiemetic protocol based on risk factors. Grade up 1 risk level for emetogenic surgery. See risk factor attachment. @ 1
 - 3. If history of prolonged PONV, treat as HIGH risk and consider scopolamine patch or substance P inhibitor.
 - 4. ⚠️ For VERY HIGH risk PONV patients, consider TIVA propofol technique + high risk prophylaxis.
 - 5. For all patients, consider opioid sparing techniques, especially MEDIUM, HIGH or VERY HIGH risk PONV patients. a. Local infiltration/ regional / peripheral nerve blocks b.
 - + Add another card
- PSH Protocols**
 - Breast PSH Checklist @ 1
 - Neurospine PSH Checklist @ 1
 - Colorectal Checklist @ 1
 - + Add another card
- Aspire Quality Measures**
 - PONV 01: Postoperative Nausea and Vomiting. Percentage of patients, aged 18 years and older, who undergo a procedure under an inhalational general anesthetic, AND who have three or more risk factors for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of at least two prophylactic pharmacologic antiemetic agents of different classes preoperatively or intraoperatively. @ 1
 - TRAN 01: Transfusion Management Vigilance. Percentage of cases with a blood transfusion that have a hemoglobin or hematocrit value documented prior to transfusion. @ 1
 - TRAN 02: Post Transfusion Monitoring. Percentage of cases with a post transfusion hemoglobin or hematocrit value less than 10/30. @ 1
 - + Add another card
- Goal Directed Fluid Therapy (GDFT)**
 - Intra-op GDFT Protocol @ 1
 - + Add another card
- Discharge Instructions**
 - Peripheral Nerve Block @ 1
 - Adductor Canal or Femoral Catheter @ 1
 - Interscalene Catheter @ 1
 - + Add another card

Access to the One Pager

Aspire Quality Measures

PONV 01: Postoperative Nausea and Vomiting. Percentage of patients, aged 18 years and older, who undergo a procedure under an inhalational general anesthetic, AND who have three or more risk factors for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of at least two prophylactic pharmacologic antiemetic agents of different classes preoperatively or intraoperatively.

1

PONV 01: Postoperative Nausea and Vomiting. Percentage of patients, aged 18 years and older, who undergo a procedure under an inhalational general anesthetic, AND who have three or more risk factors for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of at least two prophylactic pharmacologic antiemetic agents of different classes preoperatively or intraoperatively.

in list [Aspire Quality Measures](#)

Description

Add a more detailed description...

Attachments

PDF **PONV 01 Measure One-Pager.pdf**

Added May 4 at 1:58 PM - [Comment](#) - [Delete](#)

Add

- Members**
- Labels**
- Checklist**
- Due Date**
- Attachment**

Access to PONV algorithm

PONV

1. Identify ADULT patients at risk for PONV Pre- procedure scoring, 1 point for each risk factor : ♀ Female
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 Non-smoker 🍷 Post-op opioids anticipated Total: _____

2. Implement antiemetic protocol based on risk factors. Grade up 1 risk level for emetogenic surgery. See risk factor attachment.

🔗 1

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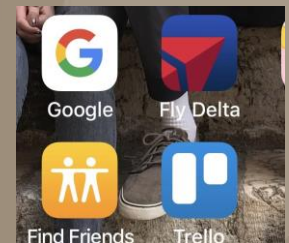
4. ⚠️ For VERY HIGH risk PONV patients, consider TIVA propofol technique + high risk prophylaxis.

5. For all patients, consider opioid sparing techniques, especially MEDIUM, HIGH or VERY HIGH risk PONV patients. a. Local infiltration/ regional / peripheral nerve blocks b.

Risk Factors	PONV Risk	Interventions Prophylaxis
0 - 1	Low	Nothing or 1 medication
2 - 3	Medium	2 medications
4	High	3 medications
Multiple Risk Factors + emetogenic surgery -or- prior failure of triple medication, prophylaxis in the past	Very High	TIVA + 3 medications

Systematic Approach Part 2

1. Follow the leader. Our ERP for colorectal surgical patients used this tool for resident education and found it successful for clinical communication
2. Hire a low-cost tech-savvy administrative person (like my daughter Catie) to fill your Trello board with relevant information.
3. Educate your providers on the app
4. Send out the email invitation to join Trello for your providers. This is how they have access to your specific board
5. Follow up to see that people have actually signed up



Performance Improvement

1. Trello board created in the beginning of May 2018
2. Presentation to anesthesia department on May 14, 2018
3. Email invitation to join Trello sent on 5/31/2018
4. Email communication to physicians sent on 5/31/2018
5. Email CRNA communication sent on 6/1/2018



Sample Section Breaker Title

(only use if necessary)

Performance Improvement

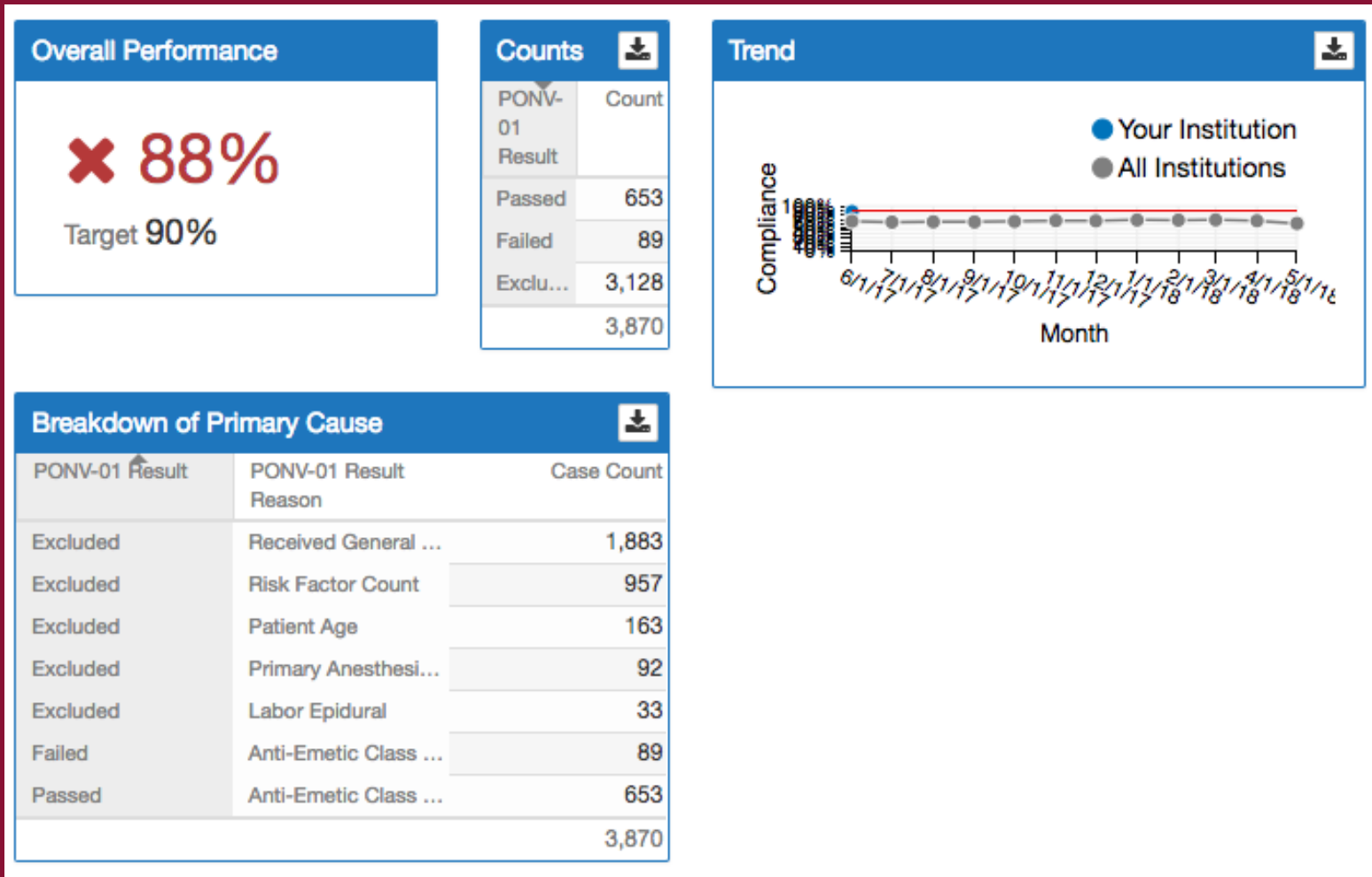
48/158 Have accepted their invitation to Trello

That is only 30%

: (

Not quite there yet!!!

Performance Improvement



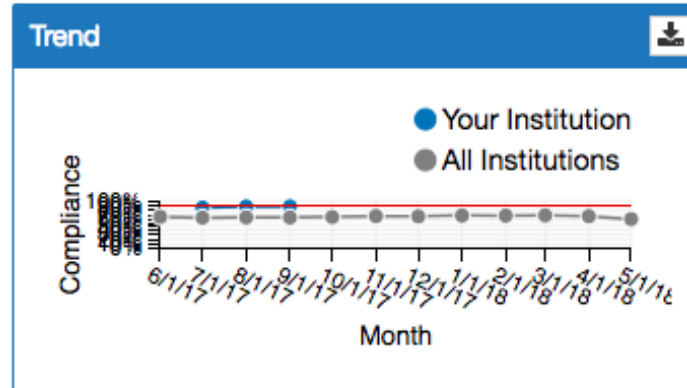
Performance Improvement

Overall Performance

✘ 88%
Target 90%

Counts

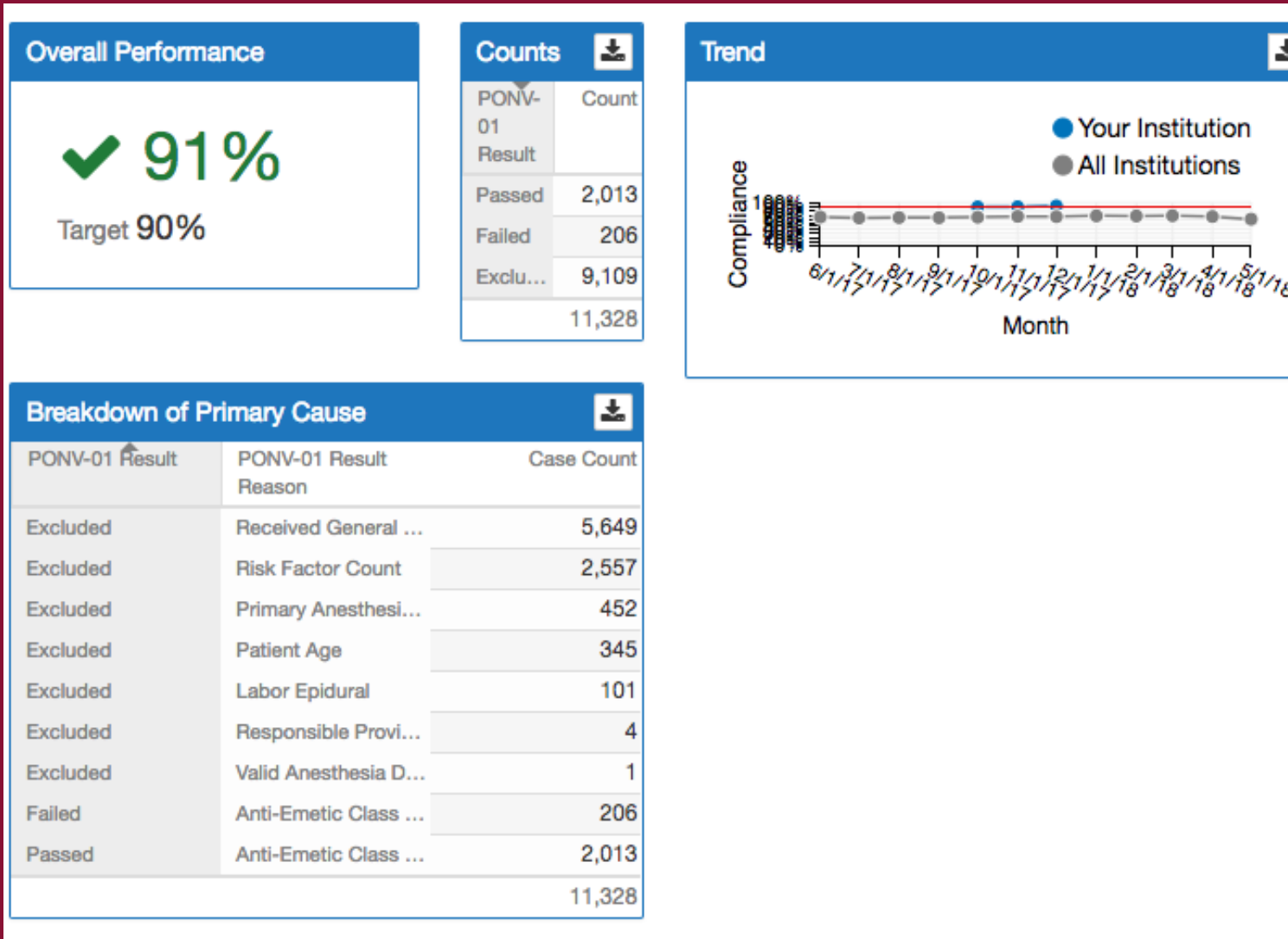
PONV-01 Result	Count
Passed	1,863
Failed	265
Exclu...	8,621
Total	10,749



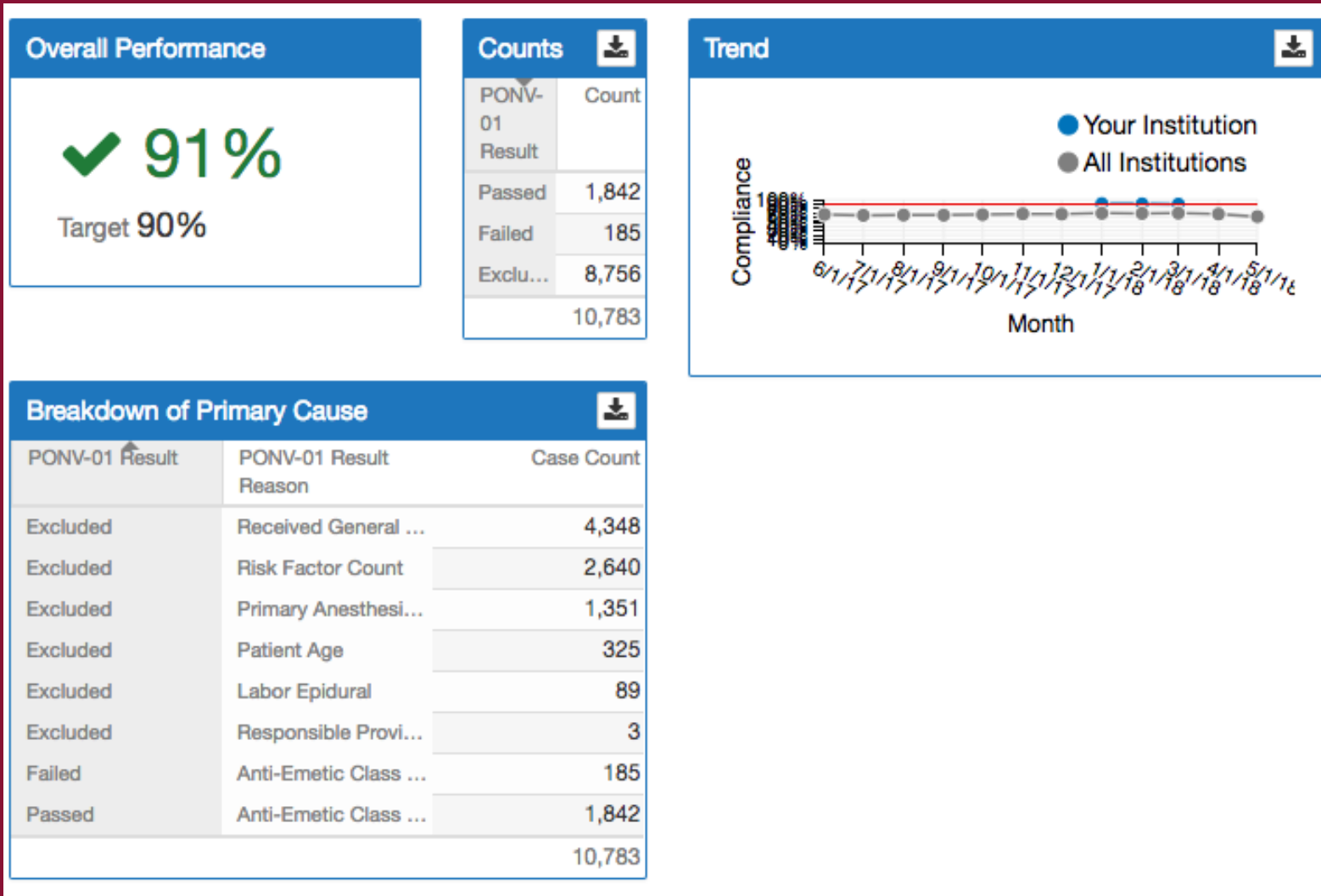
Breakdown of Primary Cause

PONV-01 Result	PONV-01 Result Reason	Case Count
Excluded	Received General ...	5,316
Excluded	Risk Factor Count	2,631
Excluded	Patient Age	352
Excluded	Primary Anesthesi...	237
Excluded	Labor Epidural	84
Excluded	Responsible Provi...	1
Failed	Anti-Emetic Class ...	265
Passed	Anti-Emetic Class ...	1,863
Total		10,749

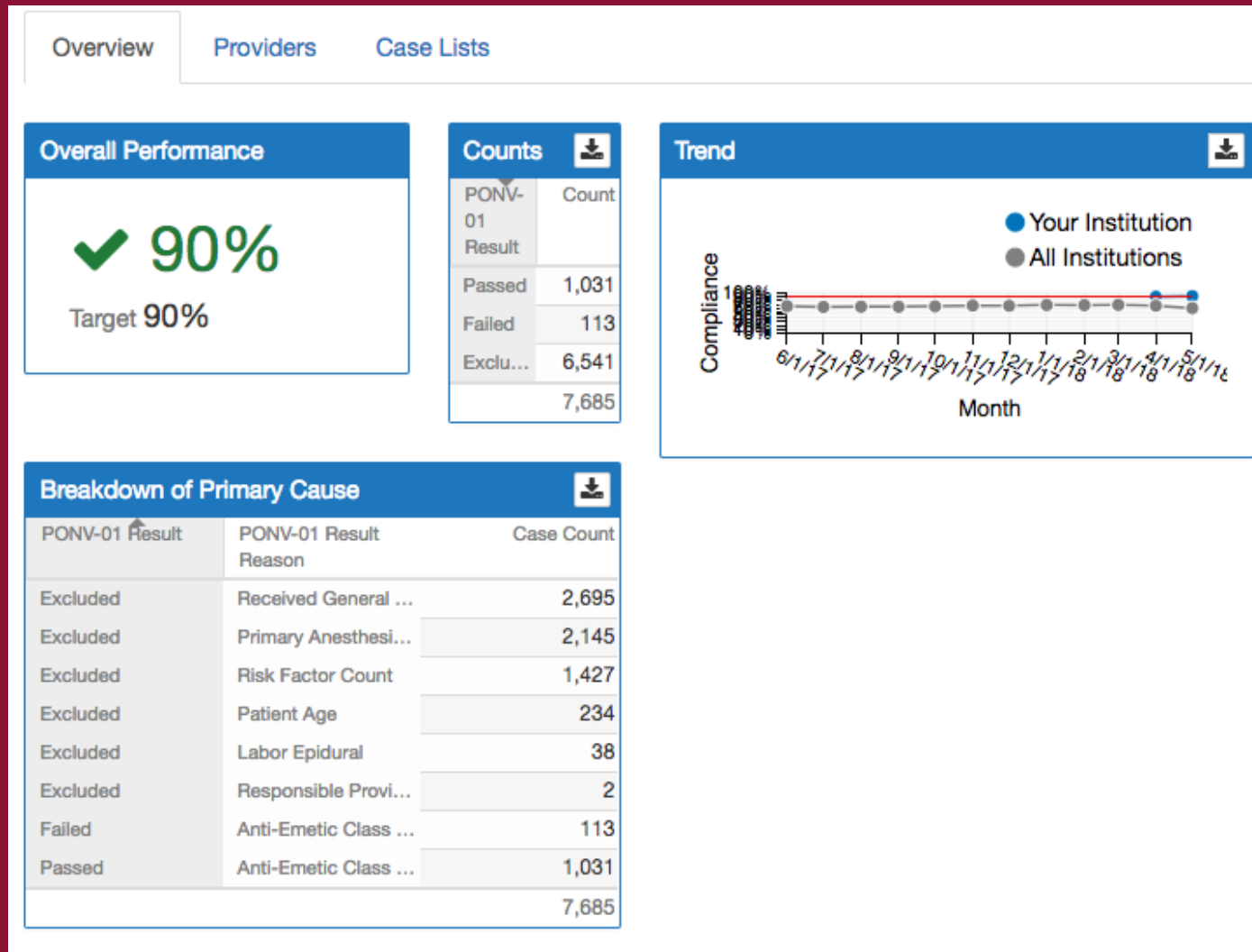
Performance Improvement



Performance Improvement



Performance Improvement



What can A4 do?

1. Encourage our physicians to discuss PONV risk assessment with our CRNA colleagues on every case and create a plan.
2. Ongoing education regarding the algorithm and the ASPIRE measure.
3. Re-invite those that have not signed up to Trello. Provide a resource for help if needed to access the information.
4. Create an intra-op electronic reminder that is linked to the patient's risk assessment to ensure the proper anti-emetics are given.

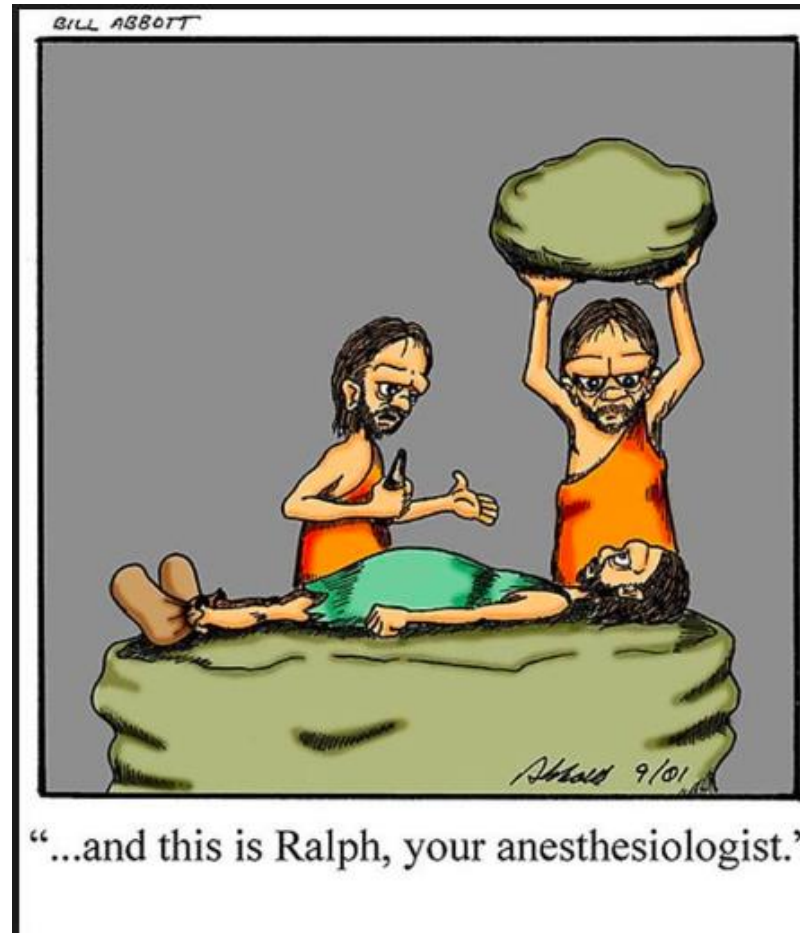
Desired Clinical Outcome

What can ASPIRE do next?

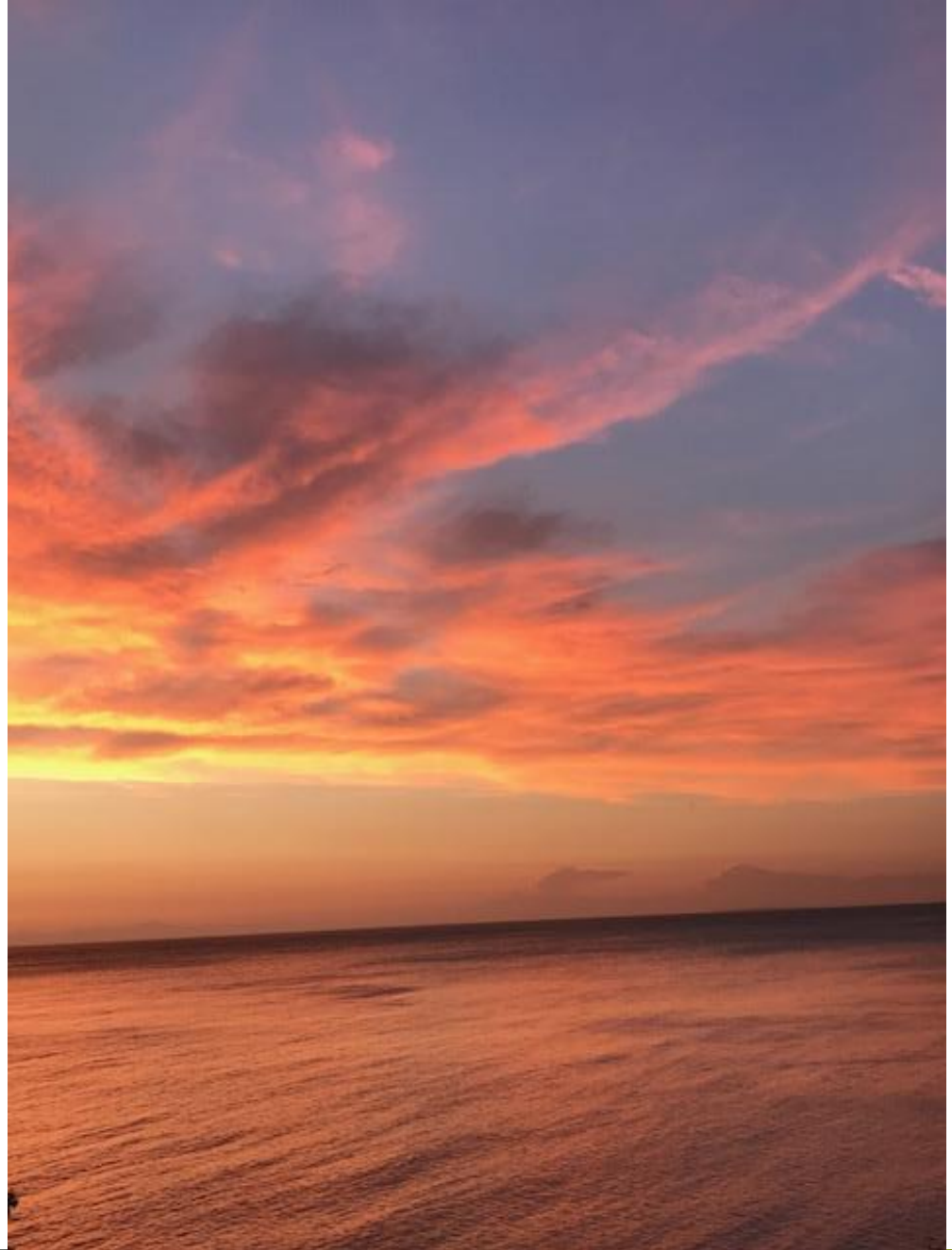
1. Extract our PACU data to see who has gotten rescue treatment for PONV. Who still has PONV after the recommended treatment was given?
2. Extract our pre-op data to see who has gotten an anti-emetic prior to the OR (this would include floor medications that were received pre-op as well as the the pre-op OR area). This would be a comprehensive list of pre-op anti-emetic treatment.
3. Assess patient populations and anti-emetics given and provide recommendations for specific subsets of populations.

Ultimate Desired Clinical Outcome

Patient Satisfaction



Thank you!



Instructions for Using the St. Joe's Template

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Whenever you are selecting color for Shape Fill, Outline and Font use only the top line from the color dropdown menu ("Theme Colors").

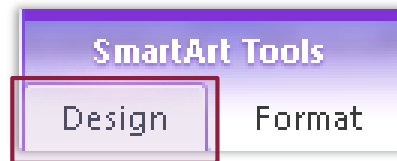


Using St. Joe's Brand Colors

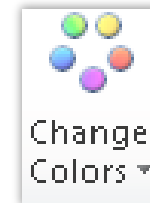
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When selecting colors for SmartArt...

1. Start by clicking the Design tab under the SmartArt Tools tab



2. Then, click the "Change Colors" button to select the desired brand colors for your SmartArt



Using St. Joe's Brand Colors

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1. Start by clicking the Design tab under the Table Tools tab

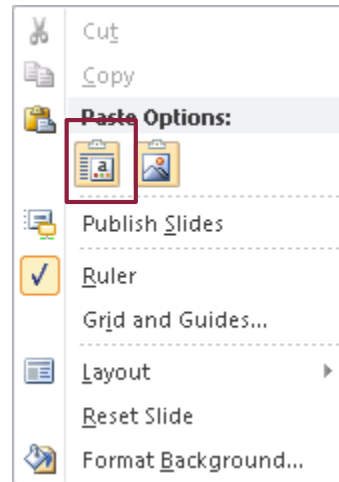


2. Then, choose your desired brand colors from the options provided in the toolbar ribbon



Importing Content

To maintain the integrity of the template, when importing content from other sources be sure to select “Use Destination Theme” from the Paste Options



Secondary Base Slide Option