Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, October 27, 2014

Attendees: P=Present; A=Absent; X=Expected Absence

A	Abdallah, Arbi 'Ben' (Wash U)	P	Lagasse, Robert (Yale)
P	Agarwala, Aalok (MGH)	A	LaGorio, John (Mercy Muskegon)
A	Aziz, Michael (OHSU)	P	Levy, Warren (Pennsylvania)
P	Becker, Aimee (Wisconsin)	P	Lirk, Philipp (AMC)
P	Bell, Genevieve (Michigan)	A	Madden, Lawrence (Mercy Muskegon)
A	Berman, Mitch (Columbia)	A	Martin, Matt (Munson)
A	Biggs, Daniel (Oklahoma)	A	Morey, Timothy (Florida)
A	Bonifer, Thomas (Allegiance)	P	Naik, Bhiken (Virginia)
P	Buehler, Katie (A4)	A	Noles, Michael (OHSU)
P	Cuff, Germaine (NYU Langone)	A	O'Donnell, Steve (Vermont)
P	Natalie Cuffman (Holland)	A	Pasma, Weize (Utrecht)
A	Dehring, Mark (Michigan)	P	Pace, Nathan (Utah
A	Domino, Karen (Washington)	P	Pagenelli, William (Vermont)
P	Eastman, Jaime (OHSU)	A	Price, Matthew (Beaumont)
A	Epps, Jerry, (Tennessee)	A	Ramachandran, Satya Krishna (Michigan)
P	Fleisher, Lee (Pennsylania)	A	Robinowicz, David (UCSF)
A	Fleishut, Peter (Weill Cornell)	A	St. Jacques, Paul (Vanderbilt)
A	Haehn, Melissa (UCSF)	P	Segal, Scott (Tufts)
P	Jerri Heiter (St. Joseph)	P	Shah, Nirav (Michigan)
A	Ianchulev, Stefan (Tufts)	P	Sharma, Anshuman (Wash U)
P	Jacobson, Cameron (Utah)	P	Simon, Tom (NYU Langone)
P	Jameson, Leslie (Colorado)	A	Smith, Jeffrey (McLaren)
A	Kappen, Teus (Utrecht)	A	Sommer, Richard (NYU Langone)
P	Samie Kendale (NYU Langone)	A	Soto, Roy (Beaumont)
P	Kheterpal, Sachin (Michigan)	A	Stefanich, Lyle (Oklahoma)
P	King, Lisa (Oklahoma)	A	Tocco-Bradley, Rosalie (St. Joseph)
A	Kooij, Fabian (AMC)	A	Tom, Simon (NYU Langone)
P	Kuck, Kai (Utah)	P	Wedeven, Chris (Holland Hospital)
A	Kuhl, Mackenzie (Marquette)	A	Wilczak, Janet (Oakwood)
P	Lacca, Tory (Michigan)		

1. Announcements
2. Review discussion at the MPOG Retreat
    a. Future Directions
        i. Having a separate QI track in the afternoon
        ii. Thoughts on Directions for next year?
            1. Do we need to make a distinction between research and QI? It seems we are creating a hard line between the two and we need to consider the overlap. We are focused on the measures and we need to be more thoughtful to the relationship between research and QI.
    b. New member – Jaime Osborne, PACU nurse and currently a professor in the School of Nursing, she will provide clinical expertise for the ASPIRE program.

3. Review QI Measure Survey Results (see Attachment A for slides from meeting)
    a. Twenty-nine people responded to the survey.
    b. We required all questions to be answered. This is a review the results of the individual questions and this is a broader snap shot of the results.
        i. Category: SCIP measures
            1. Most hospitals are showing high compliance with preop administration, where we are lacking is the type of antibiotics. If we just look at administration and it might be hard to show improvement.
            2. Amsterdam – we feel this is very important to include SCIP, because this is what our institution interested in and this will be helpful. This will be a good way to show our hospital how we are using the data.
                a. What are the National compliance measures for the Netherlands? In the 90s/50s or somewhere in between?
                    i. The quality indicators for Europe are 80 – 90 % and this is something that we need to work on in Europe.
            3. For antibiotic administration most people are good, but the issue that is a problem is re-dosing. Is it possible to look at re-dosing as a secondary measure? We have to submit to CMS 9-measures and this may be an easy measure that people are already working on in their practice.
                a. Dr. Lagasse: It is important to keep the measure, because as ASPIRE develops, you will want to learn how to retire measures. High compliance and no actual relationship to the outcome to SSI and it should not be retired until you develop strict criteria.
                b. Dr. Fleisher – One of the reasons that SCIP measure was put in reserve was because if a hospital decides not to monitor it, in the future it can be picked up again. ASPIRE can provide this data that others cannot. Reserve status is from the National Quality Forum that says a measure has topped out but it is not being unendorsed. Concerned that once SCIP 1 was no longer a national performance measure, people would give what they want and that has unintended negative consequences. It can be reinstated because all it did was go into reserve status and was not retired it was unendorsed for being an inaccurate measure.

4. Where should the efforts be put for SCIP measures, since it cannot be on all five of the measures by January? Should it be re-dosing or is it on SCIP 1? Re-dosing will be for surgeries greater than 3 – 4 hours long. Dosing intervals vary across hospitals and national guidelines may be inconsistent with hospital pharmacies. Dosing and re-dosing will be coming down the line. We will stick with measures as listed and work on re-dosing in future. All in agreement.

c. Neuromuscular blockade: TOF/neostigmine: This was indicated as an important category. We are looking to include in Year 1 and group one and we will send out the inclusion and exclusion criteria to make sure we are on the right track. Comments?
    i. When we do the neostigmine portion of the neuromuscular blockade measures, will we have criteria (agreed upon by ASPIRE group] on the timing of neostigmine administered based on the last time the neuromuscular blocker was given?
        1. If patient does not need neostigmine, we do not want the measure to determine care delivery. Neostigmine dosage reporting may not be intiated in the first year, because there are a lot of different opinions on this. Do the TOF measure first and follow up with the neostigmine measure next.
        2. Dr. Jameson, University of Colorado implemented neuromuscular blockade reporting as a package and she will send the measures/criteria/associated literature.
            a. Another way to look at this measure is the same one you use for overdosing, you can look at neostigmine as administered after extubation or administered twice as a measure of residual blockade.
d. Monitoring vigilance: Gaps in the record specifically in regards to systolic and diastolic BP.
    i. Comments? Depends on when you will be defining the time frames of the monitoring and if it is in the beginning of the case, you might expect larger gaps.
        1. We are going to look at post induction and in general anesthetics. Getting a baseline prior to induction will be important.
    ii. The feedback indicates that we need to split this into two separate measures.
e. Transfusion management: Documenting HCT and checking post-operative HCT were high on the list.
    i. In terms of where we stand in Year 1 we believe we should focus on some of the other measures that are more important.
    ii. Some sites do not get lab values and this might not be feasible.
    iii. Any strong feelings against this thought? Colorado volunteers to play with this measure to determine if this is feasible.
        1. If we have sites that are interested in some of the measures, we can work with them to have them write the script and get them involved with the development process. We will open that up to the sites to use. Do other sites have a developer available to help with these scripts?
            a. Yes, other sites do have people available and would be interested. Amsterdam would be interested in assisting.
f. Glucose management: insulin/recheck is the highest score on the survey. We plan to include this into the first group of measures?
    i. Were there any exclusion?

1. Pancreatic transplant will be excluded.

ii. We need to make sure all centers are contributing CPT codes to allow more effective comparison between procedures. Nirav and Sachin will follow up on the CPT codes.

g. Ventilator management:
   i. We are going to hold off on this measure for Year 1. This will be hard to get people to document recruitment maneuvers.
h. Colloid Management: Anyone wants to speak to why this was low rated? No response. Is this low because are not using colloids very often.
   i. We do not think that we will find anything in this to make a difference and nobody had any interest on this measure.
   ii. Dr. Becker: At Wisconsin we use albumin frequently and this will be meaningful to our institution. This should not be one of the first measures or put a lot of effort in developing it. The interest scientifically is low, but it may be more of a way to discourage use and find the abusers.
i. PONV: We will not do this for Year 1 due to the fact that this is dependent on PACU data and currently, we do not have good PACU data from institutions.
j. Overdose: Lower end of the survey scores, planning to leave it out for Year 1.
k. End Organ Failure: Rated high amongst all of them, but we will leave this out in Year 1 due to feasibility. We will try to add this in as soon as possible when we know we have the data.
l. Pain Management: Relates to PACU scoring and this will be held off for Year 1.
m. When we send out the measures we will be clear with the wording.

4. We have created a forum on the ASPIRE website under the Performance Measures tab. We can continue these debates on the forum.
   a. Once people reply to it, it pushes it to your e-mail and we will roll this out and add everyone in the committee to the forum in the next.
5. Final Decisions: Measures we are going to be moving forward with for initially:
   a. SCIP
      i. Antibiotic
   b. NMB
      i. TOF
      ii. Neostigmine
   c. Glucose Management
      i. Insulin
   d. End Organ Failure (when PACU data becomes available)
6. Roll call

Attachment A: ASPIRE Survey Results Presentation

Names

Text Response
Sachin Kheterpal
Simon Tom
Mike Aziz
Teus Kappen
Christopher Wedeven, MD
Lee Fleisher
William Paganelli
Nirav Shah
Peter Fleischut
Bhiken Naik
Satya Krishna Ramachandran
Fabian Kooij
Tim Morey
Philipp Lirk

Nathan Pace
Janet Wilczak
Karen Domino
Jerry Epps
John LaGorio
Lebron Cooper, MD
Stefanich, Lyle J
Dan Biggs
Stefan Ianchulev, MD
Roy Soto
Aimee Becker
Leslie Jameson
Paul St Jacques
Mackenzie Kuhl
Anshuman Sharma

Institutions

University of Michigan
NYU Langone Medical Center
OHSU
University Medical Center Utrecht
Holland Hospital
University of Pennsylvania
University of Vermont
University of Michigan Health System
Weill Cornell Medical College
University of Virginia
UMHS
AMC, Amsterdam
University of Florida
Academic Medical Center, University of Amsterdam, The Netherlands

University of Utah
Oakwood Hospital Dearborn Michigan
University of Washington
University of Tennessee Medical Center
Mercy Health Muskegon
Henry Ford Hospital
University of Oklahoma
University of Oklahoma
Tufts Medical Center
Beaumont Health
UWSMPH
University of Colorado
Vanderbilt
Marquette General Hospital
Washington University School of Medicine

Performance Measure Survey - SCIP

	Mean Score	Standard Deviation	Min Score	Max Score
SCIP 1 (Abx)	6.93	2.80	1	10
SCIP 2 (Temp)	7.00	2.85	1	10
SCIP 3 (beta blockade)	6.38	2.80	1	10

Neuromuscular Blockade

	Mean Score	Standard Deviation	Min Score	Max Score
NMB - TOF	7.52	1.82	4	10
NMB - Neostigmine	7.28	2.19	2	10

Monitoring Vigilance

	Mean Score	Standard Deviation	Min Score	Max Score
No 10 min gap	6.83	2.66	1	10

Transfusion Management

	Mean Score	Standard Deviation	Min Score	Max Score
Receiving PRBC	6.41	2.46	1	10
Documented Hct	7.28	2.10	1	10
PACU Hct	7.45	1.94	1	10
Hct nadir	6.21	2.23	1	10

Glucose Management

	Mean Score	Standard Deviation	Min Score	Max Score
Insulin or recheck	8.17	1.26	6	10
Recheck after insulin	7.59	2.04	1	10
Dextrose or recheck	7.17	1.98	3	10

Ventilator Management

	Mean Score	Standard Deviation	Min Score	Med Score
< 10 mins at 10cc/kg	6.83	2.54	1	10
< 20 mins at 10cc/kg	7.59	2.06	1	10

Colloid Management

	Mean Score	Standard Deviation	Min Score	Max Score
Albumin	5.03	2.37	1	8
Hetastarch/ Pentastarch/	4.55	2.05	1	8

PONV

	Mean Score	Standard Deviation	Min Score	Max Score
2 classes anti-emetics	7.21	1.93	1	10

Overdose

	Mean Score	Standard Deviation	Min Score	Max Score
Naloxone	6.72	2.43	1	10
Flumazenil	5.93	2.72	1	10

End Organ Failure

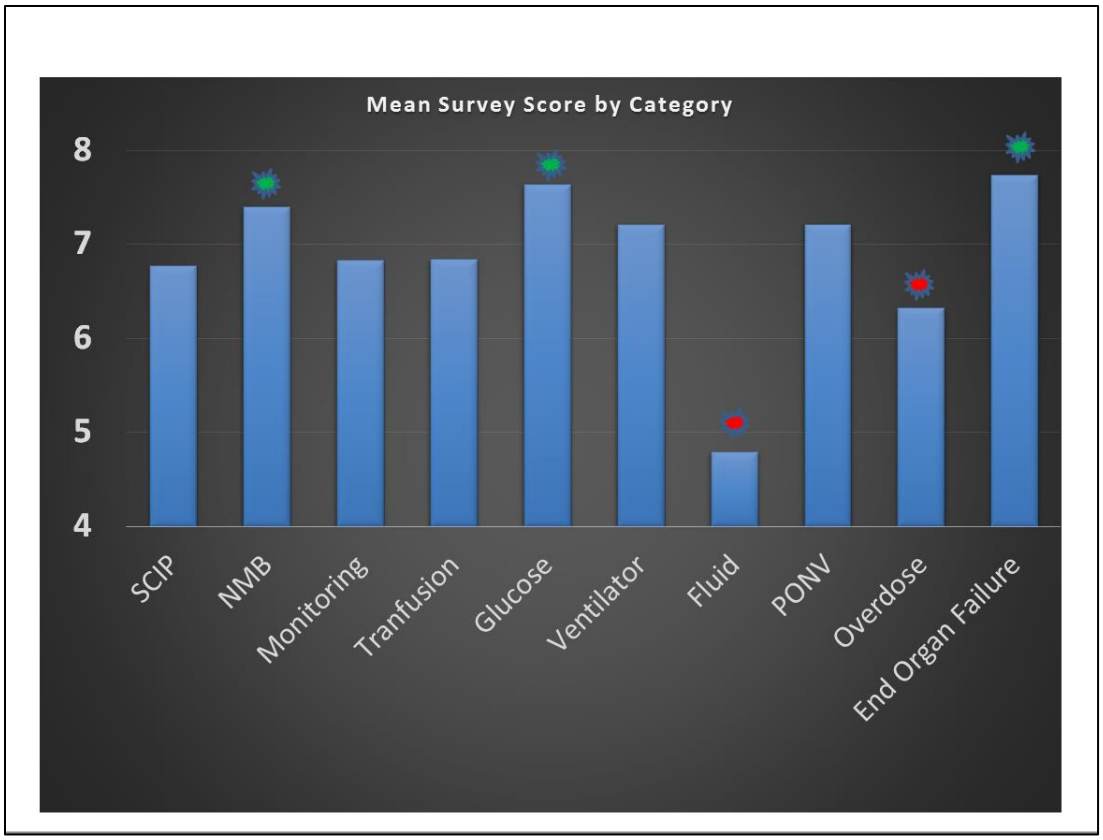
	Mean Score	Standard Deviation	Min Score	Max Score
Reintubation	8.28	1.65	4	10
Troponin	7.45	2.28	1	10
AKI	7.48	2.20	1	10

Pain Management

	Mean Score	Standard Deviation	Min Score	Max Score
Pain Score	7.55	1.97	4	10

Some of the thing (like albumin) are not common in our Country
@22/23: cannot deliver... don't have labs after 24 hours
The direction of benefit (high number or low number best) should be standardized for all quality measures. I favor making a small number (zero) be the best possible response The language describing quality measures should be standardized to avoid ambiguity. In particular, #2 is ambiguous. Is the quality measure the use of warming devices, the avoidance of hypothermia or both? Examples of rewriting the quality measures: #24: Proportion of patients with peak pain score > 8 in PACU. #1: Proportion of patients not receiving antibiotics within the SCIP recommended time window. #!5: Proportion of patients receiving sustained intraoperative mechanical ventilation with tidal volumes >= 10 ml/Kg IBW for 20 or more minutes.
I am very interested in the role that residual NMblockade plays in prolonged intubation or reintubation. However, from the cases that I have reviewed in our data base the reversal and monitoring appear to have been done. The sensitivity of the monitor being used and variability in monitoring site could play a significant role. Also the time between the last NM blocker dose and the reversal dose may have an effect. Not sure what we will capture with documenting reversal alone. With regard to the troponin level and creatinine levels I hesitate to correlate a care time interval of 4 to 7 post operative days directly with anesthesia care. How do you plan to separate the care of the intraoperative physicain from the post operative care team?

temperature normothermic (maybe above 36.5) at end of the case should be used rather than warming per se to drive change. My preference is to focus on the AQI measures for pay for performance as those that are of highest priority.
I am conflicted. Some of these are statisics I would like to know, but I don't necessarily think they are quality indicators--or are quality indicators for certain types of cases, but not all. Additionally, some of the data will be difficult to get depending on the EMR combinations that practices have. Call me if you would like to discuss this in greater detail. Respectfully, Lyle Stefanich
#4 and 5 - if patient is extubated. Not if left intubated. #14, 15, 16 and 17 - "without"? Should it be "with"? #18 All patients or those with risk factors receive prophylaxis
SCIP and other upcoming CMS measures should be prioritized. I would consider capturing PACU pain scores < or =5 and those > or = 8. Most commonly postanesthesia check of the patient occurs within 48 hrs. Not all institutions may have ways of documenting troponin and creatinin in periods greater than that. This however would be a great measure to apply when AIMS becomes part of a bigger, integrated documentation system i.e. Epic. I would consider capturing patients who receive volume expanders instead of those who do not... Every PRBC administered intraoperatively or in the PACU/ICU should be tied to a documented Hct within +/- 60 min of administration.
In general, SCIP measures are so closely monitored in-house that these aren't very important-- pretty much everybody already knows they do well.
The tidal volume is too high. Most of the current stuff says 6 range and it is calculated on height or ideal body weight not actual body weight. I think the overdose is a rare event so might pass but glucose management is a big deal.
Many of these are very dependent on exclusion criteria which are not included in the text. Ex troponin except in cardiac surgery. As is frequently the case those details are the difference between a good indicator or not.


Mean Survey Score by Category
8
7
6
5
4
SCIP
NMB
Monitoring
Tranfusion
Glucose
Ventilator
Fluid
PONV
Overdose
End Organ Failure