

# Quality Committee Meeting

November 28, 2022

10:00am - 11:00am Eastern Time



# Agenda

## **Announcements**

Upcoming Meetings  
TEMP-07-CARD Released!

## **Measure Review**

[MED 01](#) - Dr. Karen Domino (University of Washington)

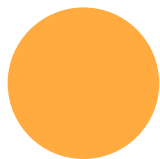
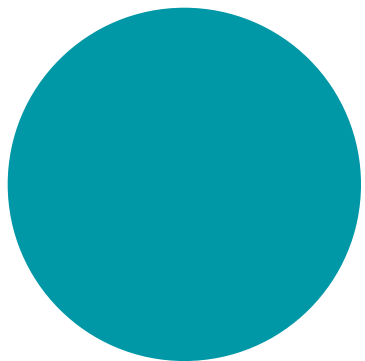
[BP 02](#) - Dr. Mark Pimentel (Brigham & Women's Hospital)

## **Measure Discussion**

Hyperglycemia measure updates  
PONV 05 Updates

# Meeting Minutes September 2022

Roll Call – via Zoom or  
contact us



# Announcements





# Featured Member November & December

[MORE INFO](#)



**Meredith Hall, MD**  
**Bronson Battle Creek**

# Welcome Seattle Children's Hospital!

[MORE INFO](#)



Seattle Children's Hospital

Chair: Dr. Jeremy Geiduschek  
Quality Champion: Dr. Sally Rampersad  
Principal Investigator: Dr. Vikas O'Reilly-Shah



# Welcome Boston Children's Hospital!

[MORE INFO](#)

Chair: Dr. Joseph Cravero  
Quality Champion: Dr. Lauren Madoff  
Principal Investigator: Dr. Morgan Brown



A photograph of the University of Maryland Medical Center building, a large, modern, multi-story structure with a mix of brick and glass facades. The building features a prominent glass-enclosed entrance on the left and a classical-style portico with columns on the right. The sky is clear and blue. A semi-transparent dark banner is overlaid on the left side of the image, containing the title and a 'MORE INFO' button.

# Welcome University of Maryland Medical Center

[MORE INFO](#)

Chair and PI: Dr. Peter Rock  
Quality Champion: Dr. Megan Anders  
IT Champion: Dr. Curt Bergstrom





# Welcome University of Texas Southwestern

[MORE INFO](#)

**tern** William P. Clements Jr. University Hospital

Chair: Dr. Charles Whitten  
Quality Champion: Dr. Trent Bryson  
Principal Investigator: Dr. Kunal Karamchandani  
IT Lead: Dr. Trent Bryson

# 2023 Meetings

**Friday, April 21, 2023**

MSQC/ASPIRE Collaborative Meeting  
Michigan Union, Ann Arbor, Michigan



**Friday, July 14, 2023**

ASPIRE Collaborative Meeting  
Henry Executive Center, Lansing, Michigan



**Friday, September 15, 2023**

ACQR Retreat  
DoubleTree Hotel, Ann Arbor, Michigan



**Friday, October 13, 2023**

MPOG Retreat  
San Francisco, California

# TEMP 07 Released!



Percentage of patients,  $\geq 18$  years age, who undergo open cardiac surgical procedures with cardiopulmonary bypass duration  $>120$  minutes with recorded temperature  $> 37.5$  degrees Celsius while on bypass for over 5 consecutive minutes

- Counter measure to TEMP 06
- Inverse measure: lower score is better
- Please include perfusionists in your review of this data
- Cardiac Subcommittee received feedback from perfusionists in creating this measure but not too late to provide additional feedback!



**Measure  
Review  
MED 01**

Dr. Karen Domino  
University of Washington

# Avoiding Medication Overdose

## ASPIRE MED-01

**Karen B. Domino, MD, MPH**

**Professor**

**Anesthesiology and Pain Medicine**

**University of Washington, Seattle, WA**

**[kdomino@uw.edu](mailto:kdomino@uw.edu)**

## **Review of Postoperative Respiratory Depression: From Recovery Room to General Care Unit**

Toby N. Weingarten, M.D., Juraj Sprung, M.D., Ph.D.

- **Patients with events in PACU are at several fold-increased risk post-op.**
- **Depressed ventilation detected in PACU persists for hours in general care units.**



# **Risk Factors for Postop Respiratory Depression**

- **OSA and sleep-disordered breathing**
- **Other patient factors:**
  - **Advanced age (>60 years)**
  - **Male sex**
  - **ASA 3 or above**
  - **CHF, pulmonary disease**
  - **Impaired cognitive status**
  - **Frailty**
  - **Chronic opioid use**
- **GA higher risk than RA**
- **Longer-acting anesthetics and opioids**
- **Sedating non-opioids**

OPEN

## Prediction of Opioid-Induced Respiratory Depression on Inpatient Wards Using Continuous Capnography and Oximetry: An International Prospective, Observational Trial

Ashish K. Khanna, MD,\*† Sergio D. Bergese, MD,‡§ Carla R. Jungquist, NP PhD,|| Hiroshi Morimatsu, MD, PhD,¶ Shoichi Uezono, MD,# Simon Lee, MD,\*\* Lian Kah Ti, MBBS, MMed,†† Richard D. Urman, MD,‡‡ Robert McIntyre Jr, MD,§§ Carlos Tornero, MD, PhD,|||| Albert Dahan, MD, PhD,¶¶ Leif Saager, Dr Med,##### Toby N. Weingarten, MD,††† Maria Wittmann, MD,‡‡‡ Dennis Auckley, MD,§§§ Luca Brazzi, MD, PhD,||||| Morgan Le Guen, MD, PhD,¶¶¶ Roy Soto, MD,### Frank Schramm, MD,\*\*\*\* Sabry Ayad, MD,†††† Roop Kaw, MD,†††† Paola Di Stefano, MSc,‡‡‡‡ Daniel I. Sessler, MD,§§§§ Alberto Uribe, MD,‡ Vanessa Moll, MD, PhD,\*\* Susan J. Dempsey, MN,§§||||| Wolfgang Buhre, MD,¶¶¶¶ and Frank J. Overdyk, MD,#### on behalf of the PRediction of Opioid-induced respiratory Depression In patients monitored by capnoGraphY (PRODIGY) Group Collaborators

- **335 hospitalized patients receiving opioids**
- **Monitored by SpO<sub>2</sub> and ETCO<sub>2</sub> for 24 hours**
- **Respiratory depression episodes – 46%**
- **Risk factors**
  - **Age ≥ 60 years**
  - **Male sex**
  - **Opioid naivety**
  - **Sleep disorders**
  - **Chronic heart failure**

# Current MED-01 Measure

- **Outcome Measure - % cases with naloxone or flumazenil**
- **Measure Time – Anesthesia start to anesthesia end**
- **Inclusions – Intraop opioids or benzodiazepines**
- **Exclusions**
  - **ASA 5 and 6 cases**
  - **Naloxone or flumazenil before opioid/benzodiazepine**
  - **Patients that are still intubated at anesthesia end**
- **No risk adjustment**
- **Success – naloxone or flumazenil was NOT required**

# Current Measure Parameters

- **Responsible Provider – longest portion of the case**
- **Threshold = 5%**
- **Opioids: morphine, fentanyl, hydromorphone, sufentanil**
- **Benzodiazepines: midazolam, diazepam**
- **Reversal medications: flumazenil, naloxone**

# Reported Incidence of Naloxone Administration

- **PACU: 0.25%\***
- **First 72 hours postop: 0.1%<sup>+</sup>**
- **Med/surg ward: 0.12%<sup>±</sup>**

\*Weingarten TN et al. J Anesth 2016;30:116-122.

<sup>+</sup>Khelemsky et al. Pain Physician 2015;18:E827-E829.

<sup>±</sup>Valencia Morales et al. Pain Medicine 2022;23:878-886.

# Recommendations

- **Modify parameter to include PACU**
- **Reduce threshold to lower amount**
- **Consider elimination of flumazenil pending MPOG assessment of use**



# MED 01 Vote

1 vote/ site

Continue as is/ modify/ retire

Need > 50% to retire measure

Coordinating center will review all votes after meeting to ensure no duplication





# Measure Review

## BP 02

Dr. Marc Pimentel  
Brigham and Women's

# BP 02 Vote

1 vote/ site

Continue as is/ modify/ retire

Need > 50% to retire measure

Coordinating center will review all votes after meeting to ensure no duplication



# Hyperglycemia Measure Updates

## **GLU 01:**

- Adding 'pass' criteria to consider cases that were administered insulin SQ within 120 minutes before the high glucose value (this change was already applied to GLU 03/05)
- Adding exclusion for cases with case duration  $\leq$  30 minutes

## **GLU 03 & GLU 05:**

- Adding exclusion for cases with case duration  $\leq$  30 minutes
- Updated definition of preop start to default to 60 minutes before anesthesia start when preop start is not documented

# Adult PONV Prophylaxis Measure (PONV 05) Updates

## Per previous Quality Committee recommendations:

- Added exclusion for TEE
- Added exclusion for endoscopy
- Includes all c-section patients, regardless of age
- Includes amisulpride as antiemetic
- Increases time period to 4 hours before c-section start time for cases that convert from labor epidural

## Additional recommendations:

- Exclude cases with duration  $\leq$  30 minutes
- Exclude MRI cases

\*Performance scores minimally impacted by these changes: +/- 2.5%



**Thank You!**



# TRAN 01 Measure Discussion

Percentage of cases with a blood transfusion that have a hemoglobin or hematocrit value documented prior to transfusion.

- If multiple units are administered, documentation of a hemoglobin or hematocrit value must be present within 90 minutes before each administration.
- Caveat: If the last hemoglobin or hematocrit drawn before the first transfusion is  $\leq 5/16$ , a second unit could be administered without rechecking hemoglobin/hematocrit.

Should we consider excluding cases where the post-transfusion hemoglobin/hematocrit is less than a certain value?