

Quality Committee Meeting

November 22, 2021



Agenda

Announcements

2023 VBR New Smoking Measures

Measure Updates (PONV 05 and GLU 05)

Mercy Health St. Mary's QI Story

Ashley Screws, MD & Kathy Scranton, ACQR

Measure Review TOC 01

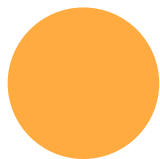
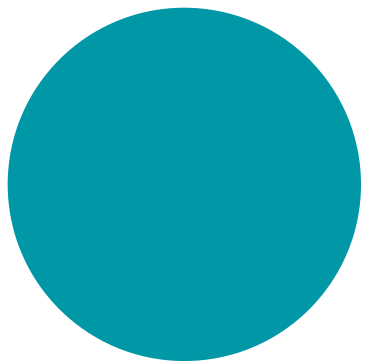
Eric Davies, MD (Henry Ford Allegiance) and Alex Bowhuis, MD (Holland Hospital)

ASPIRE Data and Joint Commission Visit

Sunny Chiao, MD, University of Virginia

Meeting Minutes September 2021

Roll Call – via Zoom or
contact us



Announcements



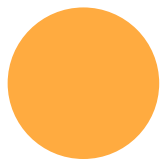
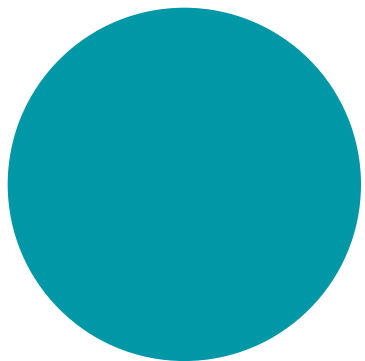


Welcome Spectrum Health Our Newest Member Site!

[MORE INFO](#)

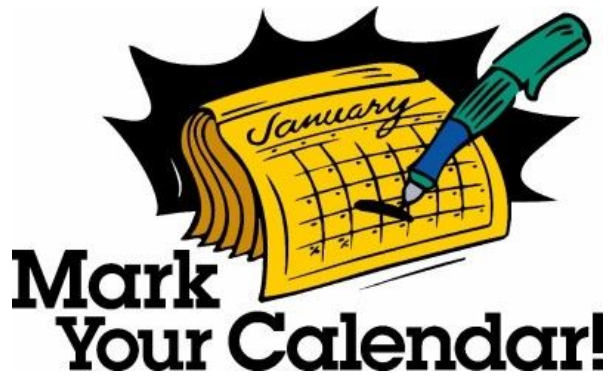
SPECTRUM HEALTH
Butterworth Hospital

Dr. Paul Jaklitsch (Department Chair, MPOG PI and IT Champion)
Dr. Ashley Agerson (MPOG Quality Champion)
Rebecca Johnson (MPOG Anesthesiology Clinical Quality Reviewer)



Upcoming Events





2022 Calendar is up
to date at
mpog.org/calendar/

ASPIRE Quality Committee Meeting: Monday, January 24, 2022

ASPIRE/MSQC Meeting: Friday April 8th, 2022



VBR 2023
Michigan Sites

VBR Refresher

Value Based Reimbursement (VBR) Program is a method to increase professional fee reimbursement based on ASPIRE measure performance

Provider must have at least 2 years of data in ASPIRE to be eligible

Performance calculated at hospital level. Additional reimbursement assigned at provider level (up to 5%)

Providers practicing at more than one hospital are assigned to the hospital where they performed the most cases

2023 VBR Measures

Measurement Period: 12/01/2021-11/30/2022

Potential increase in fee schedule (based on aggregate hospital performance):

- 3% - 2 out of 3 measures met threshold
- 5% - 3 out of 3 measures met threshold

Reimbursement Period: 3/1/2023 - 2/28/2024

Measure	Target Performance
GLU 03: Percentage of cases with perioperative glucose > 200 mg/dL with administration of insulin or glucose recheck within 90 minutes of original glucose measurement. Measure Specification	≥65%
PAIN 02: Percentage of patients ≥ 18 years old who undergo a surgical or therapeutic procedure and receive a non-opioid adjunct preoperatively and/or intraoperatively. Measure Specification	≥70%
SUS 01: Percentage of cases with mean fresh gas flow equal to, or less than 3L/min, during administration of halogenated hydrocarbons and/or nitrous oxide. Measure Specification	≥80%

**New
additional
focus:**

**Smoking
Cessation**

Measurement Period: 12/01/2021-11/30/2022

New additional reimbursement: 2% (on top of the potential 5%)

Proposed* New Measures:

Improve smoking status documentation within 30 days prior to surgery. Target: 70%

Increase the proportion of smokers who receive treatment/cessation counseling. Target: 1%

*Pending BCBSM approval



**Measure
Updates
& Feedback**

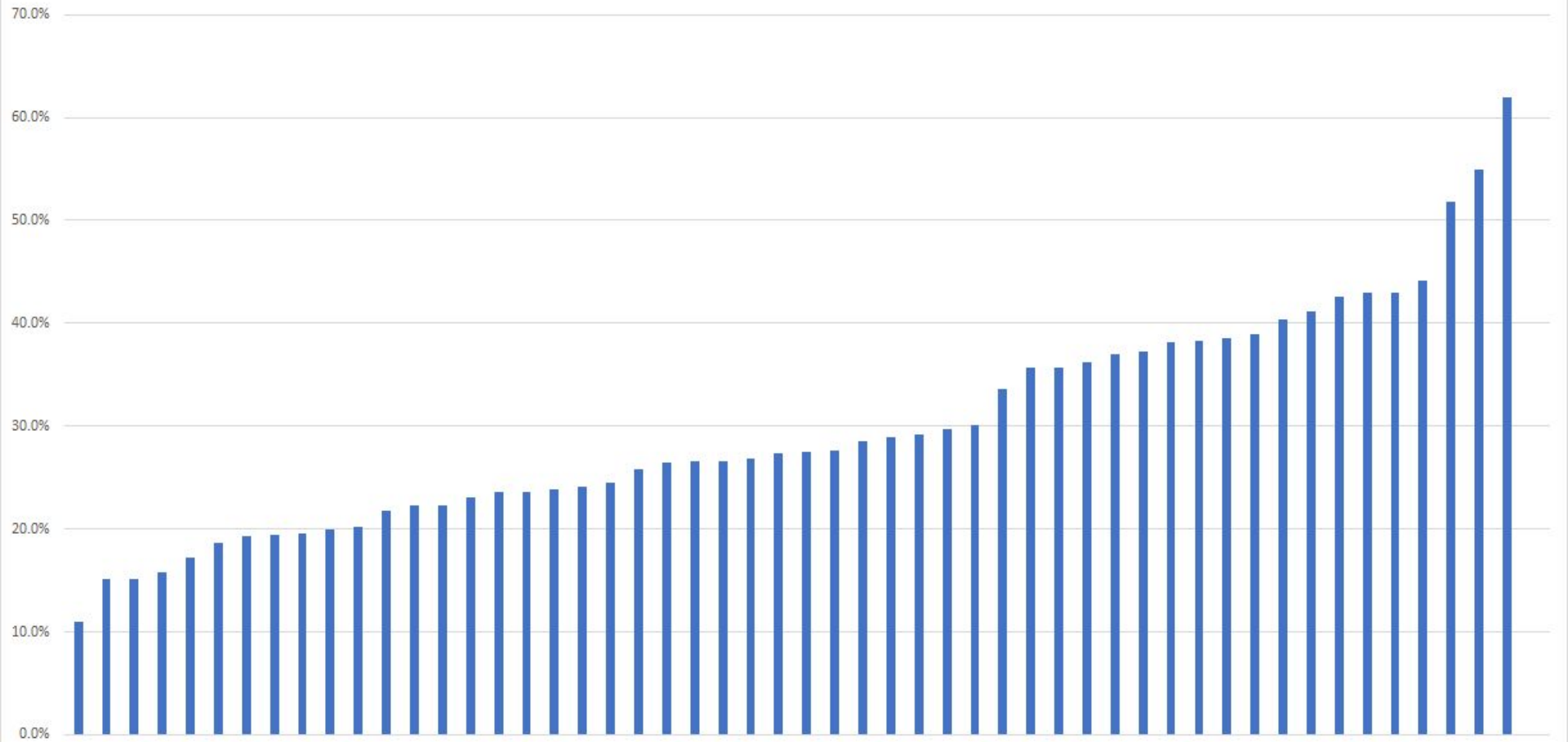
PONV Update

- May 2021 Quality Committee Discussion:
 - Fourth Consensus Guidelines for the Management of Postoperative Nausea and Vomiting released August 2020 in Anesthesia and Analgesia
 - New guidelines provide updates to both risk factors and prophylaxis recommendations for adults and pediatrics
- Pediatric PONV prophylaxis measure (PONV 04) released in August
- [Adult PONV prophylaxis](#) measure in progress - need additional guidance before release

PONV 05 Updates

- Since the May meeting, adult prophylaxis measure has been coded and validated
- Added criterion for cesarean delivery cases based upon SOAP guidelines:
 - At least 2 prophylactic pharmacologic antiemetic agents from different classes given preop or intraop (regardless of risk factors)
- Removed inclusion criteria for general anesthesia - MPOG analysis of PONV outcome and 2020 guidelines support assessment of risk factors in patients *without GA*

Preliminary Data



Current PONV 05 Specification

Percentage of patients undergoing GA, aged 18 years and older administered appropriate prophylaxis for postoperative nausea and vomiting, as defined by:

1. At least **two** prophylactic pharmacologic antiemetic agents of different classes administered preoperatively or intraoperatively for patients with **one or two risk factors**
2. At least **three** or more prophylactic pharmacologic antiemetic agents from different classes preoperatively or intraoperatively for patients with **three or more risk factors**
3. **For cesarean delivery cases only**: At least two prophylactic pharmacologic antiemetic agents from different classes preoperatively or intraoperatively.

NEW

Limitations and Next Steps

Ignoring MAC cases with post operative nausea and vomiting

Further analysis and discussion to address these cases later


Obstetric Anesthesia Subcommittee recently voted to exclude cesarean deliveries from the glycemic management measures (labor epidurals are already excluded)

Rationale:

- The obstetrician and nursing teams often are responsible for glucose management for these patients before and after the c-section
- Committee recommends building obstetric-specific glycemic management measures in the future, rather than adapt existing measures to 'fit' this population

*Still determining implications for cesarean hysterectomies and low glucose cases (GLU 02/04)

Glucose measures



**Mercy Health St. Mary's
Quality Improvement
Story**

**Ashley Screws, MD - Quality Champion
Kathy Scranton, MSN, RN - ACQR**

ASPIRE
Measure:
GLU-01

MERCY HEALTH SAINT MARY'S

- ASHLEY SCREWS MD
- KATHY LEE SCRANTON, MSN, RN

A little bit about us:

- Joined ASPIRE in 2020
- New EHR January 2020 – Epic
- Data ‘go-live’ March 2021
- 303 bed hospital located in Grand Rapids, MI
- Mean case volume per month: 1389



GLU-01

Rationale

- Surgical and anesthetic stress increases hyperglycemia incidence in both diabetics and non-diabetics.
- Hyperglycemia can also be drug induced (administration of steroids).
- Acute hyperglycemia in the perioperative period is known to increase the incidence of wound infections, overall mortality, length of stay, acute kidney injury, and delayed wound healing.
- Use of insulin to correct perioperative hyperglycemia decreases the risk of hospital complications and mortality in cardiac and general surgery patients.

<https://spec.mpog.org/Spec/Public/5>

GLU-01 measure

- Description:** The percentage of cases with intraoperative high glucose (>200mg/dL) appropriately treated or rechecked

- Inclusion:** Patients with and without diagnosis of diabetes who have a glucose level greater than 200 mg/dL between Anesthesia Start and Anesthesia End.

- Success:** Administration of insulin within 90 minutes (either IV or SQ routes) or recheck of glucose level within 90 minutes

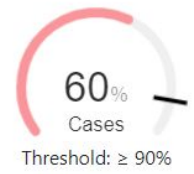
- Responsible Provider:** The provider signed in at the first glucose recheck or first administration of insulin. If neither occurred, then the responsible provider is the one signed in 90 minutes after the high glucose measurement.

<https://spec.mpog.org/Spec/Public/5>

2020 Dashboard

GLU-01: High Glucose Treated Intra-op

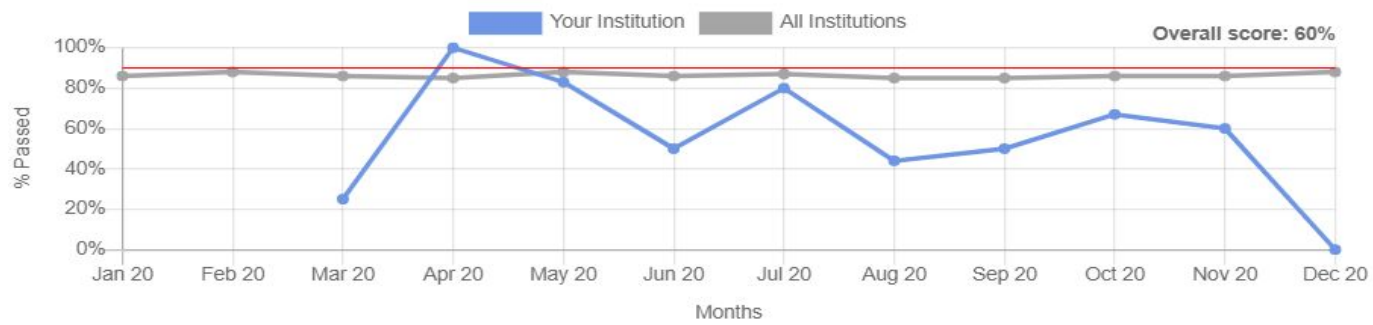
Overall Score



Result Counts

Result	Case Count
Passed	27
Flagged	18
Excluded	13,151
Total	13,196

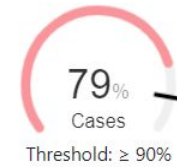
Performance Trend



2021 Dashboard

GLU-01: High Glucose Treated Intra-op

Overall Score



Result Counts

Result	Case Count
Passed	30
Flagged	8
Excluded	14,124
Total	14,162



MHSM Glycemic control

Surgical Services Guideline

GOAL: To decrease hyperglycemia preoperatively and the adverse events associated with it, including surgical site infection, while also minimizing risk of hypoglycemia. Optimize blood glucose of surgical patients in a target range of 100 to 150, with an acceptable range of 80 to 180 by using insulin

Recently revised February 2020

MHSM Glycemic control

Surgical Services Guideline

- If POCT-BG on DOS is > 150 follow the Perioperative Glycemic Control Algorithm and notify anesthesia.
- Point of Care Test- Blood Glucose (POCT-BG) performed every 2 hours on all patients with known diabetes OR any patient treated with Insulin.
- The order to perform POCT-BG is included in the Anesthesia Preoperative Patient Care Orders Policy.
- Anesthesia provider will treat based on the Perioperative Glycemic Control Algorithm
- Keep Operative Team informed by recording next POCT-BG time on whiteboard
- Anesthesia handoff includes:
 - Blood glucose level
 - Intervention dose and time of administration
 - When next POCT-BG is due

MHSM

Perioperative Glycemic Control Algorithm

Perioperative Glycemic Control Continuum (Pre, Intra, Post) Surgical Patient Algorithm for Sub-Q Administration of Rapid Acting Insulin (Humalog/Lispro)			
Blood Glucose mg/dL	MILD • AGE > 70 • Known Renal Disease • BMI < 20	MODERATE All others	AGGRESSIVE • Known Infection • Steroids Use • BMI > 30
151- 200	1 Unit	2 Units	4 Units
201 - 250	2 Units	3 Units	5 Units
251 – 300	3 Units	5 Units	7 Units
Greater than 301	*Call Anesthesia	*Call Anesthesia	*Call Anesthesia
301-400	4 Units	6 Units	8 Units
Recommendations, with Anesthesia approval & orders			
> 400	Consider Intravenous Insulin Infusion (See Institutional Policy: Initiation and Management of Insulin Infusion Therapy)		

GLU-01 – failed case review:

26 cases

MAR 2020 – AUG 2021

58% (15/26) - did not meet MHSM or ASPIRE recheck time requirements (2hr|90min)

46% (12/26) – preop BG >150 – no tx
(failed our own institutional policy)

15% (4/26) – preop BG \geq 200 – no tx

GLU-01 – other flagged case review findings

65% (17/26) - within 20 – 30 minutes
of *out of room* time

54% (14/26) - failed BG result (201-213)

35% (9/26) -had preop BG > 200 with
administration of insulin

27% (7/26) - blood source: arterial blood gas

27% (7/26) - classified as emergent -
ASA 4E (6); ASA 3E (1)

GLU-01: current state

- Core A – 3 glucometers
- Core B – 2 glucometers – *recently added 2nd*
- Preop – 2 glucometers
- Laminated cards of ASPIRE measures available in each OR

GLU-01: interventions began April 2021

- Staff meetings – 2nd and 4th Wednesday of each month
- Live meetings limited due to social distancing
- ASPIRE vs. MHSM requirements discussed at huddle, via email and through individual conversations as question arise.
- OR staff education - obtain POCT-BG if asked by anesthesia providers despite it being prior to 2 hours as outlined in institutional policy
- Circulating RN feels Anesthesia providers should ‘own’ glucometer access
- If Anesthesia providers are granted access, they will be required to perform glucometer quality control.

GLU-01: Moving forward

- No interest in changing our current policy .
Recently revised February 2020
- Begin by reviewing cases not meeting our own guidelines/policy – *timing of POCT-BG recheck and following treatment algorithm*
- Identify trends
- Continue to educate and encourage staff

Measure Review

TOC 01

Alex Bouwhuis (Holland Hospital)
Eric Davies (Henry Ford Allegiance)

TOC-01: Intraoperative Transfer of Care Review

Alex Bouwhuis, MD

Amy Poindexter

Holland Hospital / Holland, MI

What is TOC-01?

- Percentage of patients who undergo a procedure under anesthesia in which a permanent anesthesia staff change occurred, who have a documented use of a checklist or protocol for the transfer of care from the responsible anesthesia practitioner to the next responsible anesthesia provider.
- Exclusions: OB non-operative care, labor epidurals, handovers between supervising anesthesiologists.
- Threshold: 90%

Checklist Items

- Identification of patient
- Age
- Gender
- Weight
- Allergies
- Discussion of pertinent/attainable medical history/preop meds
- Surgical procedure and course
- Anesthetic management and issues or concerns
- Expectations / Plan
- Introduction of new provider to surgical team

Why TOC-01?

- Communication errors are a leading cause of iatrogenic injury/death
 - Joint commission reports that the number one cause of anesthesia-related sentinel events is breakdown in communication. ¹
- Perioperative period is high stakes—mistakes can lead to rapid deterioration

Intraoperative Hand Overs

- Have you ever played the game “telephone”?
- Opportunity for information loss and misinformation with every handover
 - One 2014 study showed that anesthesia care transitions were significantly associated with higher odds of experiencing major in-hospital mortality/morbidity—8.8, 11.6, 14.2, 17, 21.2% with increasing # handovers. ²
- Unrealistic to eliminate provider exchanges in the OR (practicality, lunch breaks, restroom).
 - Practical to limit them
 - Improve communication to minimize mistakes

Utility of Checklists

- To nobody's surprise, a standardized checklist or protocol minimizes data loss / misinformation during transfers.
- Studied ad nauseum, mostly re: OR -> PACU transfers
 - Less recent studies
- 2014 study in NEJM showed that the rate of medical-errors decreased by 23% ($p < 0.0001$) and preventable adverse events decreased by 30% ($p < 0.0001$) after implementation of a checklist. There was no negative effect on workflow. ³
- 2015 study in A&A showed significant improvements in information exchange when a checklist was used (vasopressor use, antiemetics, EBL, and info about areas of concern, $p < .003$). Clinician satisfaction with communication higher in checklist group. ⁴
- 2017 study in the EJA showed that intraoperative handover training and display of a checklist in the OR improved information transfer by 43% between anesthesia providers ($p < 0.001$). ⁵

TOC-01 Modifications

- Pretty simple logic here... information loss occurs during handovers, the more handovers the worse it is, and in the period period this can lead to catastrophe.
- Holland Hospital has our checklist built into cerner.
 - Click on it to enter it into the record and the checklist pops up for us to go through
 - ASPIRE is able to capture this data easily
- Are any of you limited by operations issues or technological issues that are site specific?
- What is causing poor performing sites to fail?

Final Recommendations

- We recommend to continue the measure as is...
- There are many causes of iatrogenic harm, but prominent among them are communication-related.
- It's relatively easy to make a checklist...
- It's relatively easy to implement a checklist...
- Harder to change provider behavior but the juice is worth the squeeze.

References

1. Joint Commission. Sentinel event data—event type by year (The Joint Commission) 2016. Available at: www.jointcommission.org/se_data_event_type_by_year/. Accessed November 1.
2. Saager, L., Hesler, B. D., You, J., Turan, A., Mascha, E. J., Sessler, D. I., & Kurz, A. (2014). Intraoperative transitions of anesthesia care and postoperative adverse outcomes. *Anesthesiology*, *121*(4), 695–706. <https://doi.org/10.1097/aln.0000000000000401>
3. Changes in medical errors with a handoff program. (2015). *New England Journal of Medicine*, *372*(5), 490–491. <https://doi.org/10.1056/nejmc1414788>
4. Agarwala, A. V., Firth, P. G., Albrecht, M. A., Warren, L., & Musch, G. (2015). An electronic checklist improves transfer and retention of critical information at intraoperative handoff of care. *Anesthesia & Analgesia*, *120*(1), 96–104. <https://doi.org/10.1213/ane.0000000000000506>
5. Jullia, M., Tronet, A., Fraumar, F., Minville, V., Fourcade, O., Alacoque, X., LeManach, Y., & Kurrek, M. M. (2017). Training in intraoperative handover and display of a checklist improve communication during transfer of care. *European Journal of Anaesthesiology*, *34*(7), 471–476. <https://doi.org/10.1097/eja.0000000000000636>

THE SINGLE BIGGEST
PROBLEM IN
COMMUNICATION IS THE
ILLUSION THAT IT HAS
TAKEN PLACE.

PLAYWRIGHT **GEORGE BERNARD SHAW**,
BORN IN DUBLIN, COUNTY DUBLIN

DOMAINEHOME.COM



Poll - 1) keep as is, 2) modify, 3) retire