

ASPIRE Collaborative Meeting

July 14, 2023 Henry Center - East Lansing, Michigan

How to Implement Quantitative Neuromuscular Monitoring into Your Practice

Ross Renew, MD - Mayo Clinic, Florida



Risks of residual neuromuscular blockade include hypoxemia, impaired pulmonary function, upper airway obstruction, postop pneumonia, and respiratory failure.

Assessment Nomenclature:

- Clinical assessment = 5 –sec head lift, grip strength, etc...
- Subjective evaluation = Peripheral nerve stimulator (PNS)
- Quantitative (objective) monitoring = monitor that stimulates a peripheral nerve, measures the response to stimulation, and converts this signal to objective data

2023 ASA Practice Guidelines for Monitoring & Antagonism of NMB

Refer to <u>Dr. Ross Renew's presentation</u> for practical interpretation and application of these recommendations.

Reimagining our Patients and Their Care: Simple (and not so simple) changes to improve surgical patient care.

Afton Hassett, Psy. D- Associate Professor University of Michigan

Perioperative Psychological stress = Poor Outcomes

- Resilience strongly predicts chronic pain outcomes.
- Build resilience by engaging in pleasant activities, savoring, and acts of kindness.

Practicing Gratitude:

Emotional exhaustion (EE) in health care providers is common and linked to lower quality of care.

- A single-exposure trial conducted by Adair and colleagues (2020), found that writing a gratitude letter improved well-being.
- 1575 health care workers
- Significant improvements in emotional exhaustion, happiness, and work-life balance between the intervention and 1-week follow-up (P<.001).

Moving Forward:

- Typical concerns of patients: What's scary?
- Points of contact: Preop & Induction. Asking patients to describe their top travel destination during induction.
- Environmental changes: Calming environments reduce stress -> better outcomes

ASPIRE Quality Improvement Stories

PAIN 01 - Holland Hospital

Quality Champion: Chris Wedeven, MD

ACQR: Amy Poindexter, BSN, RN

- Began tracking scores 2019
- Created an order set that was completed in February 2023 to add oral acetaminophen for pre-op sedation
- >25% improvement in performance!

PONV 05 - Henry Ford - W. Bloomfield

Quality Champion: Bryan Cohen, MD

ACQR: Kim Finch, MSN, RN

- Monitored performance starting in Jan 2022
- Released 3 Epic PONV prophylaxis BPAs in May 2022 (available in Epic BPA library)
- Involved system-wide committee for PONV education
- More than 2-fold improvement system-wide!
- Educational materials:
 - Emails
 - BPA posters
 - Educational 1-2 page flyers regarding risk factors and ways to reduce PONV

MSHIELD: Carol Gray, MPH and Matthias Kirch, MS



Health Equity and Social Determinants of Health.

- MSHIELD CQI (Michigan Social Health Interventions to Eliminate Disparities) is a "partnering CQI"
- MSHIELD has expertise in working with data involving social determinants of health and health disparities
- One of MSHIELD's primary goals is to be a partner to all existing CQIs to help each CQI achieve their quality improvement goals in a way that advances health equity