

# ASPIRE

# Summer Meeting

July 20<sup>th</sup> 2018



9:45 a.m. – 10:35 p.m.

Developing a Culture of Performance Improvement

Jim Bagian, MD, PE

Michigan Medicine

10:35 a.m. – 10:50 a.m.

Break

10:50 a.m. – 11:20 a.m.

QI Stories Part 1 – ASPIRE Sites

Dr. Traci Coffman - St. Joseph Ann Arbor, Chelsea and Livingston

Dr. Matthew Price - Beaumont Royal Oak

11:20 a.m. – 12:00 p.m.

Measure Feedback

Leif Saager, MD, MMM

ASPIRE Director, Quality Initiatives and Clinical Integration

12:00 p.m. – 1:00 p.m.

Lunch

1:00 p.m. – 1:30 p.m.

QI Stories Part 2 – ASPIRE Sites

Dr. Christopher Wedeven – Holland Hospital

Dr. William Hightower - Henry Ford Health System, West Bloomfield

1:30 p.m. – 1:45 p.m.

New Development and Technical Updates

Katie Buehler, MS, RN, CPPS

Clinical Program Manager

1:45 p.m. – 2:00 p.m.

Risk Adjustment and Outcomes Measures

Mike Mathis, MD

MPOG Research Faculty

2:00 p.m. – 2:15 p.m.

How Informational Measures Inform Your Practice and are the Basis of Change

Douglas Colquhoun MB ChB, MSc, MPH

MPOG Research Faculty

2:15 p.m. – 2:45 p.m.

Performance Review and Closing Remarks

Nirav Shah, MD

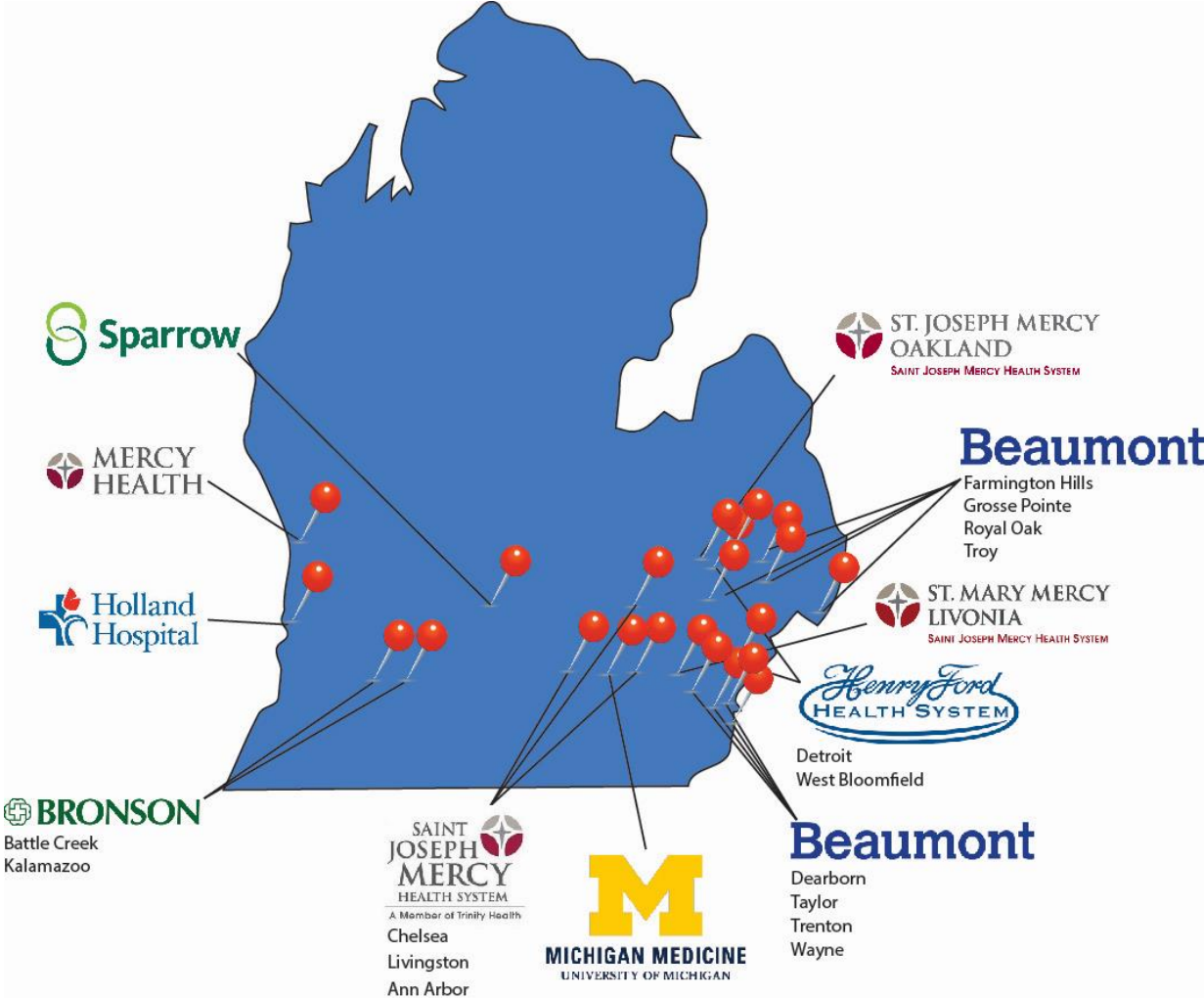
Program Manager

# Updates

- Opioid equivalency
- Transfusion Toolkit
- Handover audits
- MOCA
- Data Integration Update
- PROSPER



# Thank You



Nonprofit corporations and independent licensees  
of the Blue Cross and Blue Shield Association





# Welcome



Beaumont Hospital, Trenton  
QC: Ashvin Patel, MD  
ACQR: Tiffany Malenfant

Beaumont Hospital, Wayne  
QC: Marina Dymont, MD  
ACQR: Tiffany Malenfant



# Opioid Equivalency

- National focus on opioid consumption
- Few standards on appropriate limits
- Limited information on variation of care
- Variable level of evidence for conversion factors
- We learned from Michigan-OPEN
  - First step to figuring out the right # pills/ patient was to figure out the range.
  - No one knew where they were
- Less is not necessarily better

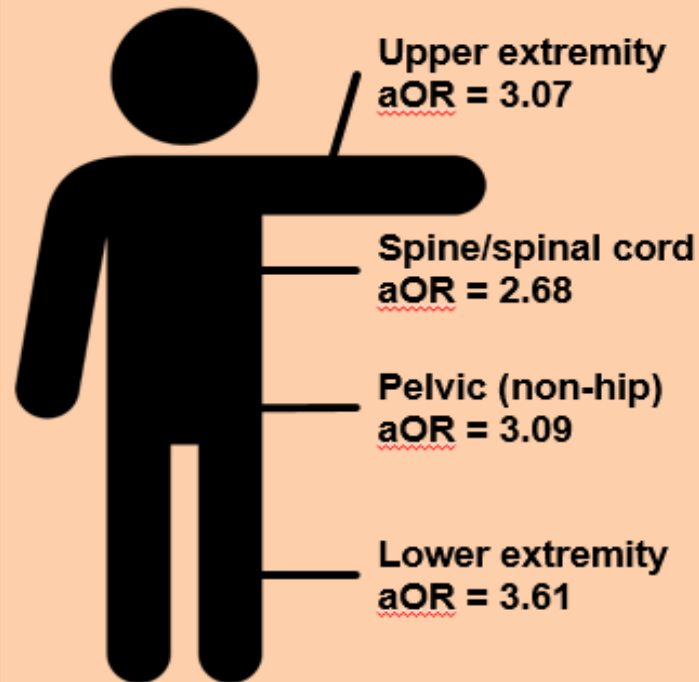
# Opioid Use Before Surgery: 34,186 participants from a single tertiary care center

Preoperative opioid  
use common



23%

Likelihood higher for  
some surgeries



Opioid users report  
different characteristics




Higher rates of substance use,  
comorbidities, sleep apnea,  
psychological distress, widespread  
body pain




## CARDIAC

Average administration: Based on a 6.7 hour case and 70kg patient (mg morphine IV)

 **75** Average (all sites) 100


## SPINE

Average administration: Based on a 3.3 hour case and 70kg patient (mg morphine IV)

 **16** Average (all sites) 22


## UPPER ABDOMEN

Average administration: Based on a 3.1 hour case and 70kg patient (mg morphine IV)

 **23** Average (all sites) 25


## LOWER ABDOMEN

Average administration: Based on a 2.7 hour case and 70kg patient (mg morphine IV)

 **20** Average (all sites) 23


## HYSTERECTOMY

Average administration: Based on a 3.7 hour case and 70kg patient (mg morphine IV)

 **25** Average (all sites) 25


## KNEE/POPLITEAL

Average administration: Based on a 2.5 hour case and 70kg patient (mg morphine IV)

 **12** Average (all sites) 13

## HIP

Average administration: Based on a 2.5 hour case and 70kg patient (mg morphine IV)

 **12** Average (all sites) 15

## LOWER ABDOMEN

Average administration: Based on a 2.7 hour case and 70kg patient (mg morphine IV)

↓ 20 Average (all sites) 23

Average administration: Based on a 2.7 hour case and 70kg patient (mcg fentanyl IV)

200

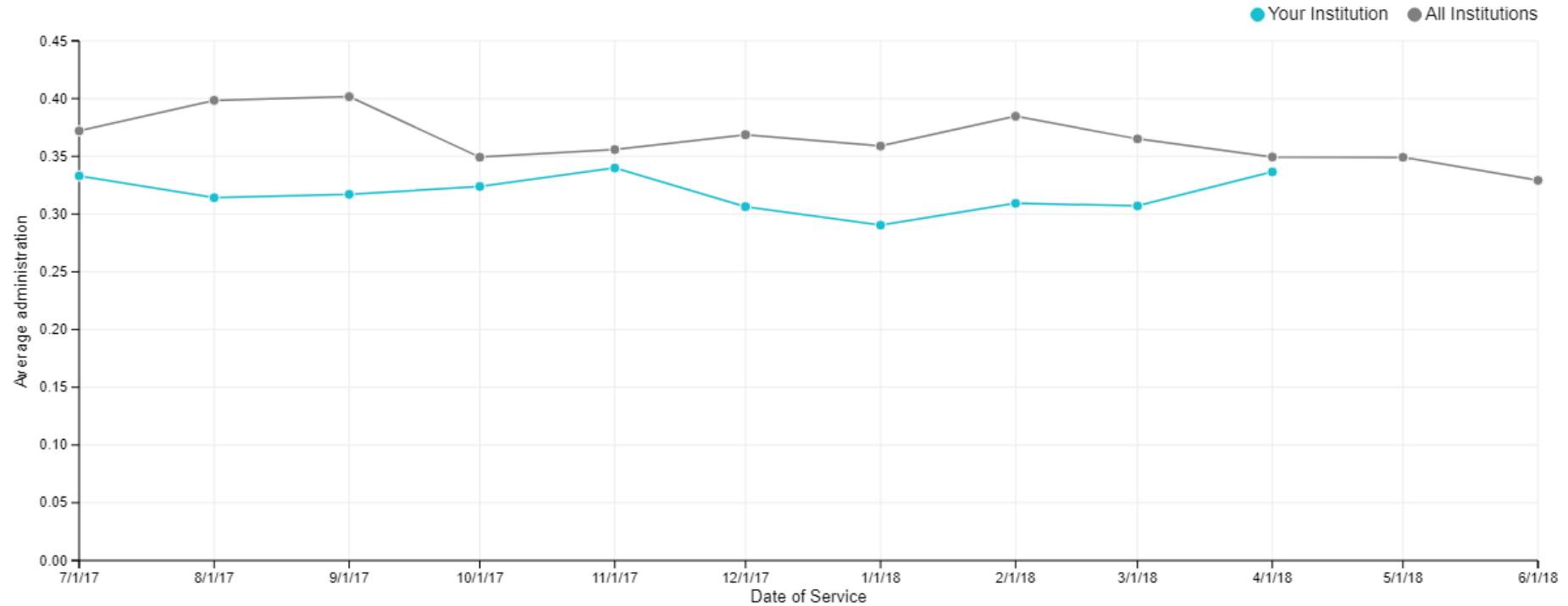
Average administration: Based on a 2.7 hour case and 70kg patient (mg morphine PO)

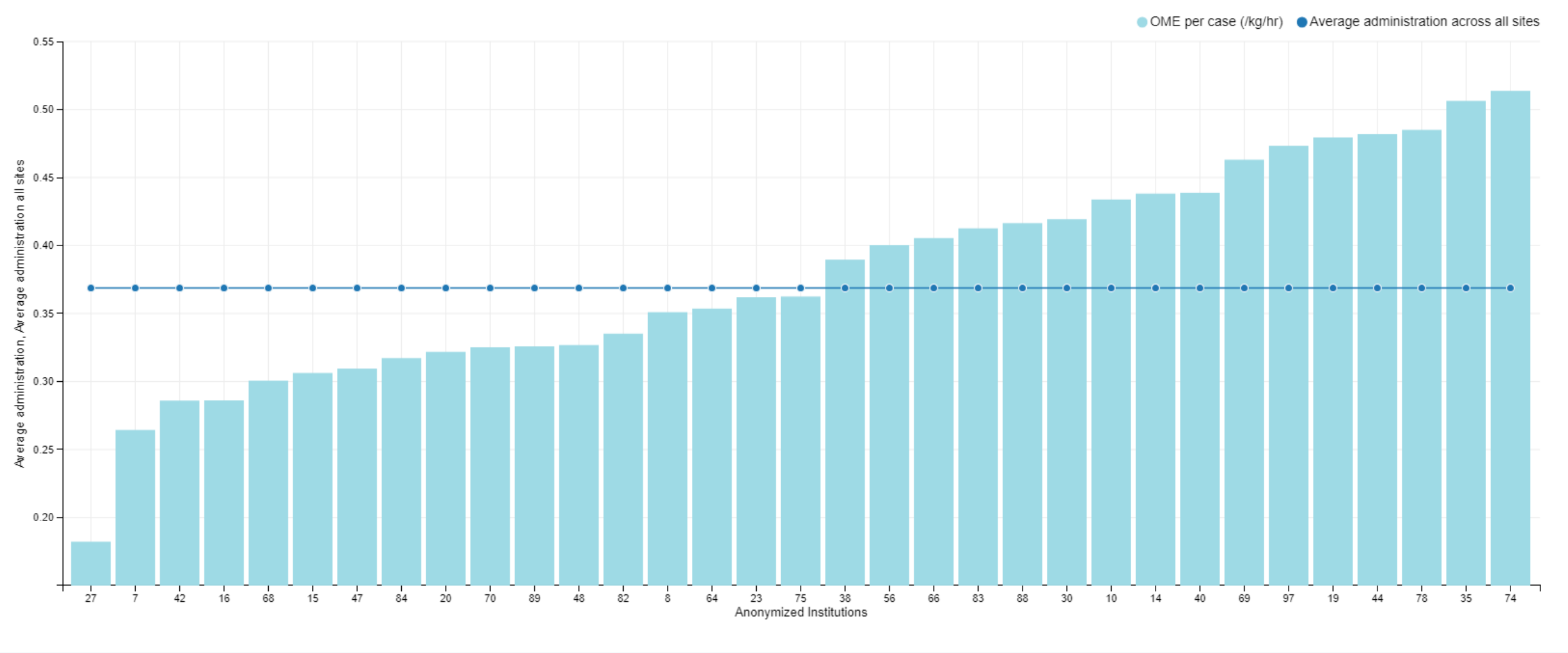
60

Average administration by weight and case length (mg/kg/hr PO)

0.32

## Average administration per case per month





# Handover Audits

- Over 100 handover audits completed
- 7 sites participated
- Need to incorporate feedback into ASPIRE Dashboard or MQUARK
- May ask all sites next year to participate



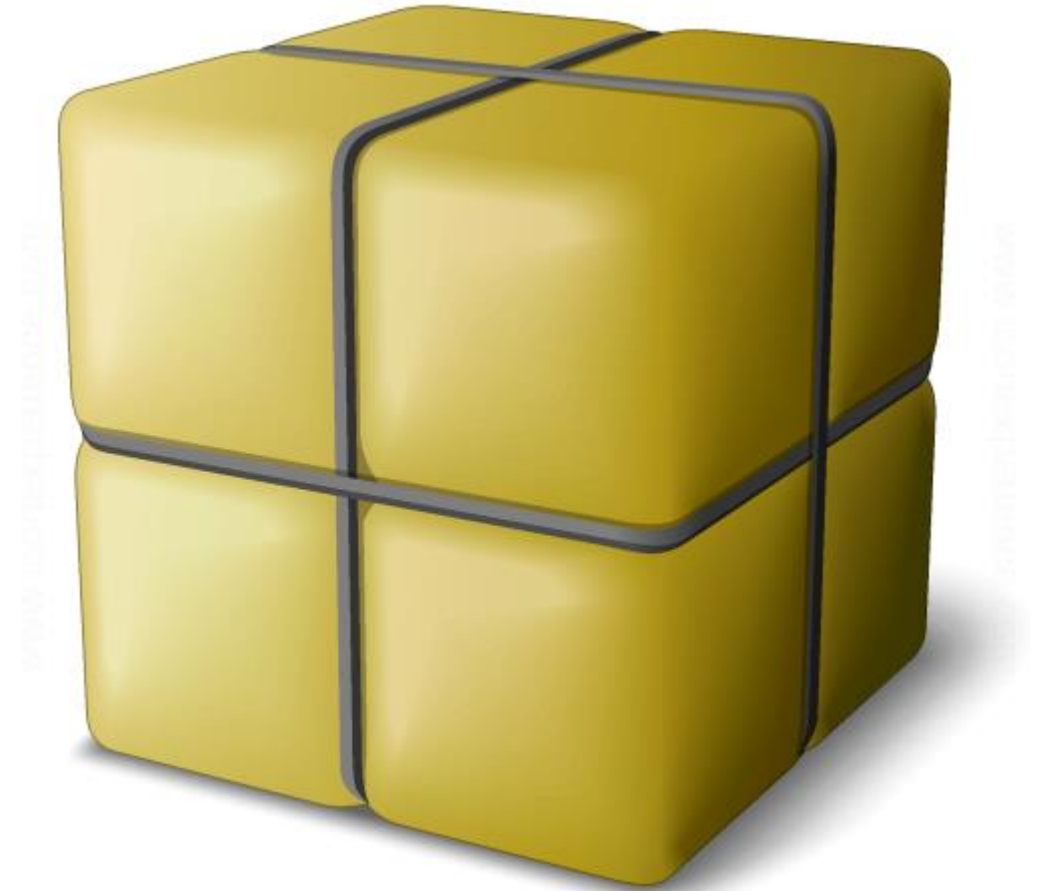
5. Background			
	Yes	No	NA
Introductions (Nursing/Anesthesia/Surgery)	<input type="radio"/>	<input type="radio"/>	
Identification of Patient	<input type="radio"/>	<input type="radio"/>	
Pertinent PMH/PSH	<input type="radio"/>	<input type="radio"/>	
Discussion of Procedure Performed	<input type="radio"/>	<input type="radio"/>	
Allergies	<input type="radio"/>	<input type="radio"/>	
Contact Precautions (if applicable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Anesthetic Management		
	Yes	No
Airway management (Mask/LMA/ETT)	<input type="radio"/>	<input type="radio"/>
Type of anesthetic (general vs. sedation)	<input type="radio"/>	<input type="radio"/>
Anesthetic Complications/Primary Concerns	<input type="radio"/>	<input type="radio"/>

7. Medications			
	Yes	No	NA
Preoperative Meds	<input type="radio"/>	<input type="radio"/>	
Sedations medications. Reversal administered? (if applicable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscle relaxants: Time Given. Reversal administered? (if applicable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pain Management	<input type="radio"/>	<input type="radio"/>	
PONV Hx & Meds Administered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Transfusion Toolkit

- Review of literature
- Consolidation of guidelines
- Best practices from other CQIs
- ASPIRE summary data
- ASPIRE quality measure information







# Perioperative Transfusion Stewardship



## TRAN 01 Measure

**Success:** Hemoglobin or hematocrit value checked before each transfusion

## TRAN 02 Measure

**Success:** Hematocrit value at end of case less than or equal to 30% and/or hemoglobin value documented as less than or equal to 10 g/dL

## **Transfusion Measure Exceptions:**

- Massive Transfusions (4 units or more of blood)
- Massive blood loss: EBL  $\geq$  2000ml (> 1500ml for C-sections)
- Burn Cases
- ASA 5 & 6
- Labor Epidurals
- Obstetric hemorrhage cases
- Patients <2 years old
- Patients <12 years old undergoing a cardiac procedure
- Pediatric cases (<12 years old) where either the transfused PRBC or EBL was greater than 30cc/kg (peds massive blood loss)

## Transfusion Considerations:

- Decision to transfuse should be based on objective assessment of anemia including Hgb/Hct in addition to signs and symptoms
- For most transfusions, should be able to check hemoglobin or hematocrit before administration
- For pediatric cases (<12 years), check before first transfusion and again after 15cc/kg of PRBCs have been administered
- In the absence of acute, massive hemorrhage, administer one unit at a time
- Recheck hemoglobin or hematocrit after each transfusion to determine if additional units are indicated
- For obstetric hemorrhage or massive transfusion scenarios, follow site protocols
- Most patients do not need to be transfused to a Hct > 30%

For complete measure specifications and supporting literature, please visit <https://mpog.org/quality/our-measures/>

# mpog.org/quality/measure-toolkit/



1. [Quality Champion Presentation](#): PowerPoint presentation for site champions to utilize for department education on transfusion practices.
2. [Transfusion Pocket Guide](#): For placement in Operating Rooms as a reference tool for anesthesia providers.
3. [Comprehensive Collection of Summaries](#): Compilation of prominent references associated with avoiding respiratory complications.
4. Additional Transfusion Resources: Transfusion guidelines and protocols from various CQIs.
  - American College of Obstetrics and Gynecology: [Maternal Safety Bundle for Obstetric Hemorrhage](#)
  - American College of Surgeons: [Massive Transfusion Protocol](#)
  - MARCQI: [Blood Transfusion Project- Reducing Transfusion in the MARCQI Population](#)
  - MTQIP: [Proposal for monitoring site performance for massive transfusions \(MT\)](#)
  - Blood Conservation in Thoracic Surgery: [STS Clinical Guidelines](#)
  - STS Renal Failure After Cardiac Surgery: [Webinar, May 2018](#)

# Coming Up – Anesthesia CPT Prediction in Measures

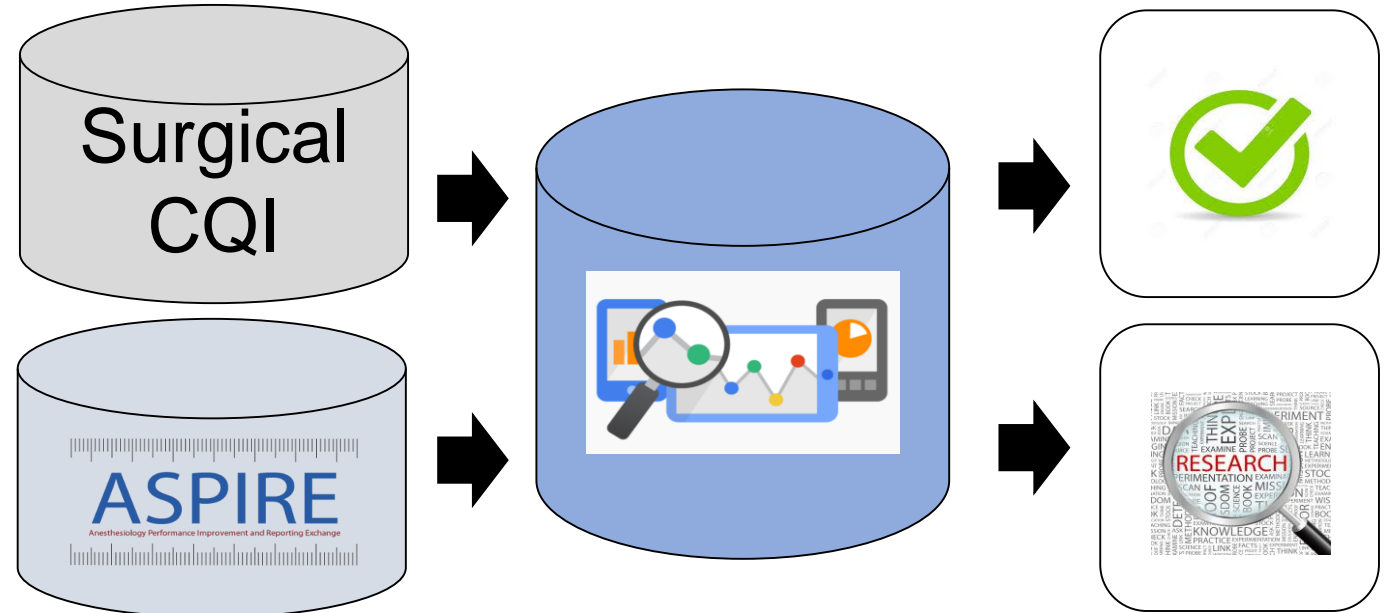
- We've built a machine learning algorithm that takes procedure text and predicts the top 3 anesthesia CPT codes
- We are going to use this to be less dependent (but not replace) on the billing codes that you send to us

Condition	Condition Value	Result
Is Valid Case	Yes	Included
Patient Age	57	Included
Baseline MAP	80	Included
ASA Class	ASA Class 3	Included
Labor Epidural	No	Included
Anesthesia CPT	00300 (Predicted)	Included
Anesthesia CPT	00320 (Predicted)	Included
Anesthesia CPT	00400 (Predicted)	Included
Any BP Taken	Yes	Included
Minutes below 55	30	Failed
Time of Low MAP	20:13:00 (Duration: 1, MAP: 54)	Info
Time of Low MAP	20:19:00 (Duration: 1, MAP: 53)	Info
Time of Low MAP	17:50:00 (Duration: 1, MAP: 51)	Info
Time of Low MAP	19:25:00 (Duration: 1, MAP: 41)	Info
Time of Low MAP	19:17:00 (Duration: 1, MAP: 53)	Info
Time of Low MAP	20:20:00 (Duration: 1, MAP: 53)	Info
Time of Low MAP	21:04:00 (Duration: 1, MAP: 45)	Info
Time of Low MAP	21:08:00 (Duration: 1, MAP: 49)	Info
Time of Low MAP	18:27:00 (Duration: 1, MAP: 35)	Info
Time of Low MAP	21:01:00 (Duration: 1, MAP: 38)	Info

Displaying 1 to 20 of 20.

# Data Integration Update

- MSQC – merge complete
- MUSIC – compliance details
- MTQIP – pilot with UM data
- Master data use agreement pending
- Next step – need your feedback
- Then show you the data!



# MOCA®



Dear Nirav,

You have enrolled in the ASPIRE MOCA Part IV activity. This is a reminder that you must attest to reviewing your failed cases for 12 months via the MOCA attestation button available in the MPOG Quality Performance Report.

To complete the attestation activity, please click on the available link below and attest at this time.

May

Attestation Expires Jun 30, 2018



THE AMERICAN BOARD OF ANESTHESIOLOGY  
*Advancing the Highest Standards of the Practice of Anesthesiology*

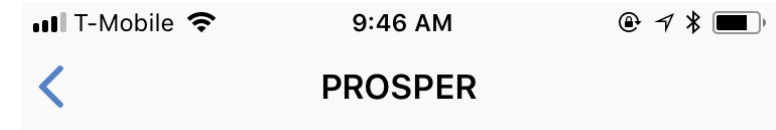




# PROSPER

A research study to understand how surgery can affect quality of life for patients.

The PROspective Study of Perioperative Experience and Recovery (PROSPER) uses data from your mobile phone combined with surveys to help provide this information.





**PROSPER**

Multicenter Perioperative Outcomes Group

## About this Study

PROspective Study of Perioperative Experience and Recovery

-  Collects health data
-  Collects location data

## Enrolling in the Study

This study allows open enrollment and is looking for participants. Tap the "Join Study" button to start the consent process.



## About Multicenter Perioperative Outcomes Group

We are a group of passionate individuals from more than 50 hospitals across 18 states and 2 countries, working together to improve care for patients undergoing surgery. Our members include clinicians, quality improvement experts, software developers, statisticians, researchers, and administrators.

Over the last decade, we have built a comprehensive

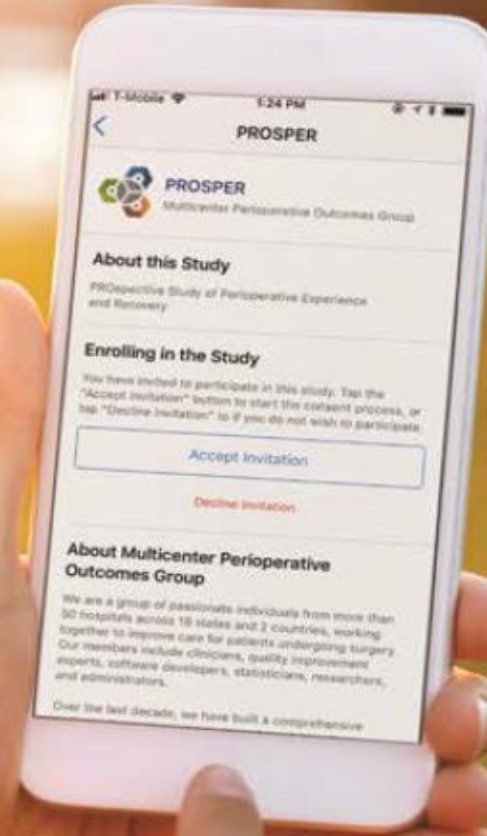
# PROSPER - Why do it? What have we done so far?

- Quality improvement measurement will increasingly focus on patient reported information
- Patient “reported” information includes both active and passively collected data
- We want to be leaders in measuring quality with patient reported data
- Rolled out at several clinics at UM

Participate in a mobile application research study to help us understand how a procedure changes your activity, quality of life, pain, and mood.

- Are you 18 years old or older?
- Are you having a procedure with anesthesia?
- Do you have an iPhone or Android phone?

# HELPING YOU PROSPER



Join our research study  
**PROSPER!**

**For More Information  
Please Contact:**

**Dr. Sachin Kheterpal**

Department of Anesthesiology

mpog-prosper@med.umich.edu

IRB #HUM00136663

**Available exclusively in  
the Apple App Store and  
the Google Play Store**



## What does this app do?

- Complete health surveys using your mobile phone
- Track and visualize your recovery
- Compare your results to other patients

## How to enroll:

1. Download MyDataHelps from the Apple App Store or the Google Play Store.
2. Search for "PROSPER" under the Studies section.

Insert  
Logo  
Here



# Benefits

- Receive information about patients in your institution that enroll
- Help inform anesthesia focused patient reported measures
- Can participate as a co-investigator

# What is needed

- Place flyers/posters in preoperative and surgical clinics
- Discuss with or refer us to interested surgeons



# Outreach

- How do we influence anesthesia care within MI?
- Expansion? Knowledge sharing?
- Who can we partner with?



# Next up, our keynote: Jim Bagian, MD, PE

- Patient Safety Leader
- Physician
- Astronaut
- Engineer
- Director of the Center for Healthcare Engineering and Patient Safety, University of Michigan
- Professor, Department of Anesthesiology and College of Engineering

