MSQC

Michigan Surgical Quality Collaborative

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MSQC Program Director

QI initiative	Year Initiated	2012 Baseline Rate	2016 Baseline Rate	Current Rate (2020)	Target
Reduce Morbidity Rates (all procedures)	2012	11.8%	10.9%	6.26%	9%
Reduce Sepsis Rates (all procedures)	2012	2.63%	2.58%	2.30%	2%
Reduce SSI Rates (all procedures)	2012	3.67%	3.23%	3.05%	2.5%
Reduce Readmissions (all procedures)	2014	6.74%	6.49%	5.61%	5.8%
Reduce ED Visits (all procedures)	2014	9.45%	8.36%	7.09%	7.3%
Reduce LOS (all procedures)	2014	3.87 days	3.18 days	2.89 days*	4.2 days
Reduce Opioid Prescribing (average OME prescribed for all procedures)	2017	N/A	N/A (2017 baseline = 193)	80.7 OME	<180 OME

Hernia
Lap Chole
Colectomy
Hysterectom
y
Whipple

MSQC Hernia Care Pathway

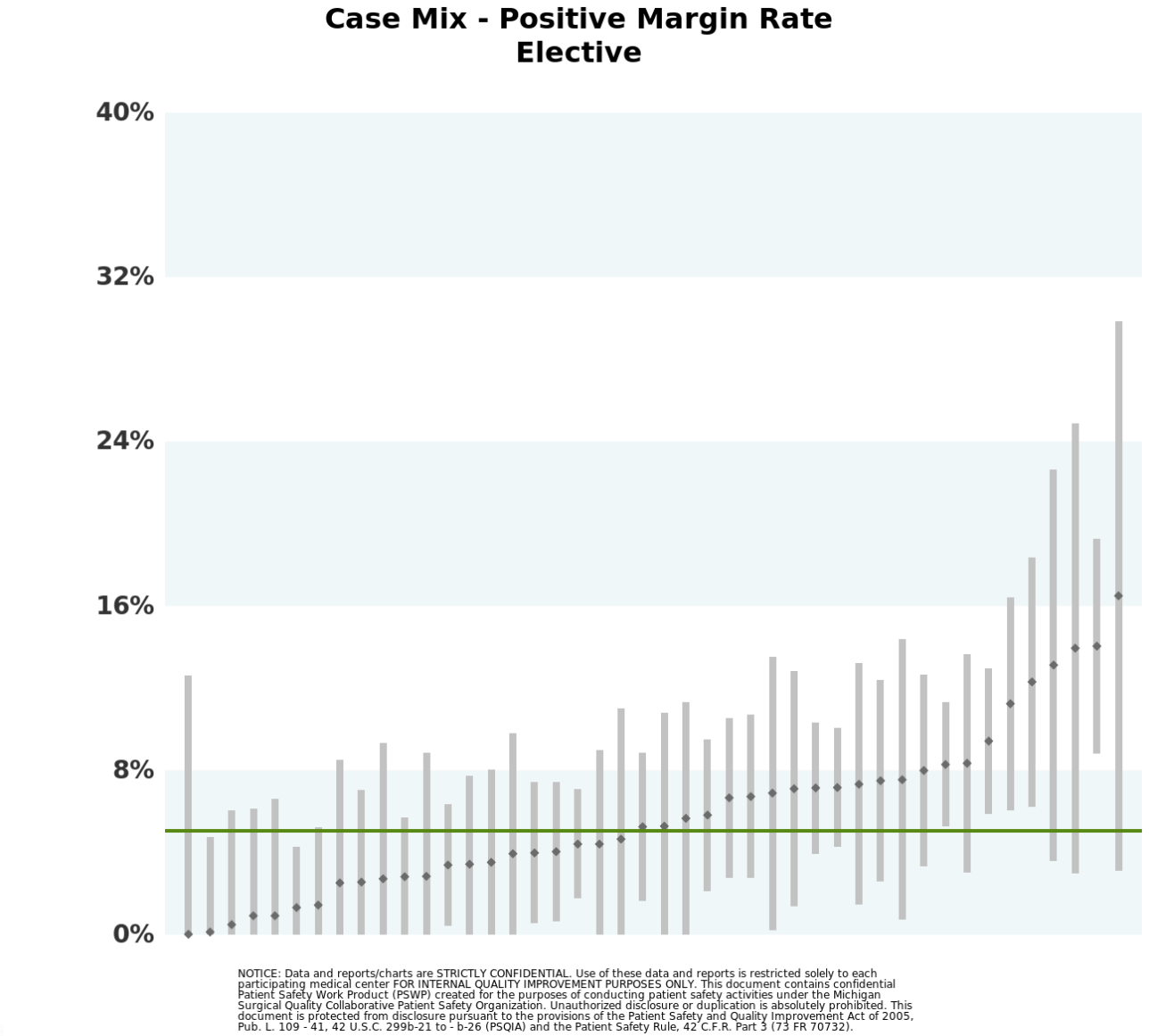
PreOp	Patient Education -Pain expectations/ management -Wound care -Postoperative ambulation and activity guidelines -Return to work	Preoperative Planning/ Prehabilitation -Tobacco cessation: 1 month prior to surgery -Weight loss counseling for BMI>40 -Simple, uncomplicated cases : Perform in ambulatory setting when feasible Bilateral inguinal hernias consider MIS	Labs/Radiology Labs -Fasting glucose or HbA1C -Simple, uncomplicated cases: No routine imaging -Major/Complex cases: Noncontrast CT w Valsalva MRI as alternative if contraindication to CT	Glycemic Control -HbA1c screening for one or more characteristics within the categories below: - Diabetes: Type 1, Type 2, Gestational DM or Family History of DM - Metabolic Syndrome: Low HDL, High Triglycerides or PCOS - Patient Characteristics: Age ≥45, BMI ≥30, Blood Pressure ≥130/85 or HTN Preop Referral if: -HbA1C 6.5%- 8.5%: Consult PCP or endocrinology for management of glycemic control -HbA1C ≥8% or glucose >250 mg/dL: Consult PCP or endocrinology for management of glycemic control AND consider postponing surgery date
Immediate PreOp	Preoperative Planning/ Prehabilitation -Tobacco cessation: 1 month prior to surgery -Weight loss counseling for BMI>40 -Simple, uncomplicated cases: L:MPe rform in ambulatory setting when feasible Bilateral inguinal hernias consider MIS	Preoperative Shower/Bath -Shower with soap or antiseptic agent on at least the night before surgery -Provide product and clear instruction	Appropriate IV Prophylactic Antibiotics -Simple, uncomplicated cases: Controversial if wound class is considered clean and mesh not indicated Major,Complex Cases: -Indicated for repairs requiring mesh Cefazolin 2g IV for patients <120kg Cefazolin 3g IV for patients ≥ 120kg -Administer 30-60 minutes before incision -See ASHP guidelines in resources for other acceptable antibiotic regimens and beta-lactam alternatives	Multimodal Analgesia -Review pain management plan preop holding -Acetaminophen 1000mg	Prevention of PO NV -Screen all patients for PONV risk -Administer antiemetic regimen based risk assessment score -Risk Assessment Example : 4 Primary Risk Factors : Female; Non-smoker; History of motion sickness; previous PONV; Expected administration of postoperative opioids Score 1 for each applicable risk factor 0-1 risk factors : Ondansetron 4mg 15min prior to end of case 2 risk factors : Choose one or two agents listed below 3 risk factors : Choose one or two agents listed below 4 risk factors : Apply Scopolamine patch at least 2 hours before induction, Administer Dexamethasone 4-8mg IV after induction, Ondansetron 4mg IV at end of surgery
IntraOp	Normothermia -Maintain body temperature of 96.8°F [36°C]	Lung Protective Ventilation -For patients with normal pulmonary function undergoing general anesthesia with endotracheal intubation, administer increased Fio2 during surgery and after extubation in the immediate postoperative period. -To optimize tissue oxygen delivery, maintain perioperative normothermia and adequate volume replacement.	Alcohol-based Skin Preperation -Use alcohol-based prep	Euvolemia -Tailor infusion of crystalloids to avoid excess fluid administration
	Redosing of Antibiotics Intervals: -Cefazolin 4 hours Refer to ASHP guidelines in resources	Multimodal Analgesia -Administer ≥2 non-opioid analgesia medications Examples: -IV Lidocaine -Local wound infiltration with long-acting anesthetic -TAP or regional block if not done preop - Ilioinguinal and iliohypogastric nerve blocks for open inguinal hernia repairs -Spinal anesthesia -Ketamine -Ketorolac 30 mg IV at end of case for routine inguinal repairs -Infuse all port sites with short and long-acting local anesthetic	Operative Note Dictation -Type of hernia(s) -Type of mesh utilized -Mesh placement/fixation (location and fixation such as suture, tac, etc.)	Avoidance of Tubes Foley Catheter -Simple, uncomplicated cases: Consider no foley catheter -Complex cases: Consider removal of catheter at end of case Nasogastric tube -Consider as appropriate for large ventral hernia repairs; laparoscopic repairs; bowel manipulation or lysis of adhesions Postop drains -If large skin flaps or large mesh insertion, drains may reduce seroma/fluid accumulation
PostOp	Multimodal Analgesia - Follow Michigan OPEN opioid prescribing recommendations: Oxycodone 5mg 10 tablets https://opioidprescribing.info/ -Schedule non-opioid analgesics instead of PRN for first 72 hours : Alternating Acetaminophen 650mg with Ibuprofen 600mg every 3 hours with 6 hours between dosing of acetaminophen and ibuprofen - Use opioids for breakthrough pain only		Normothermia in PACU -Maintain temperature >96.8°F [36°C] in PACU -Utilize forced air warmer (Bair hugger) PRN	Patient Education -Pain expectations/ management -Wound care -Activity Expectations/Return to Work
Post Discharge	Contact Patient within 2 business days - Make postop phone call to patients within 2 days of discharge (72 hours if Friday case) - Ensure patient has contact information for postoperative questions - Increase follow up contact for patients at high risk for ED visits or readmissions	Clinic Visit within 2-4 weeks -Single return clinic visit for uncomplicated cases -May utilize telemedicine for some follow up visits		

References
-Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection (2017). https://jamanetwork.com/journals/jamasurgery/fullarticle/2623725
-Michigan Opioid Prescribing and Engagement Network (2018). https://opioidprescribing.info/

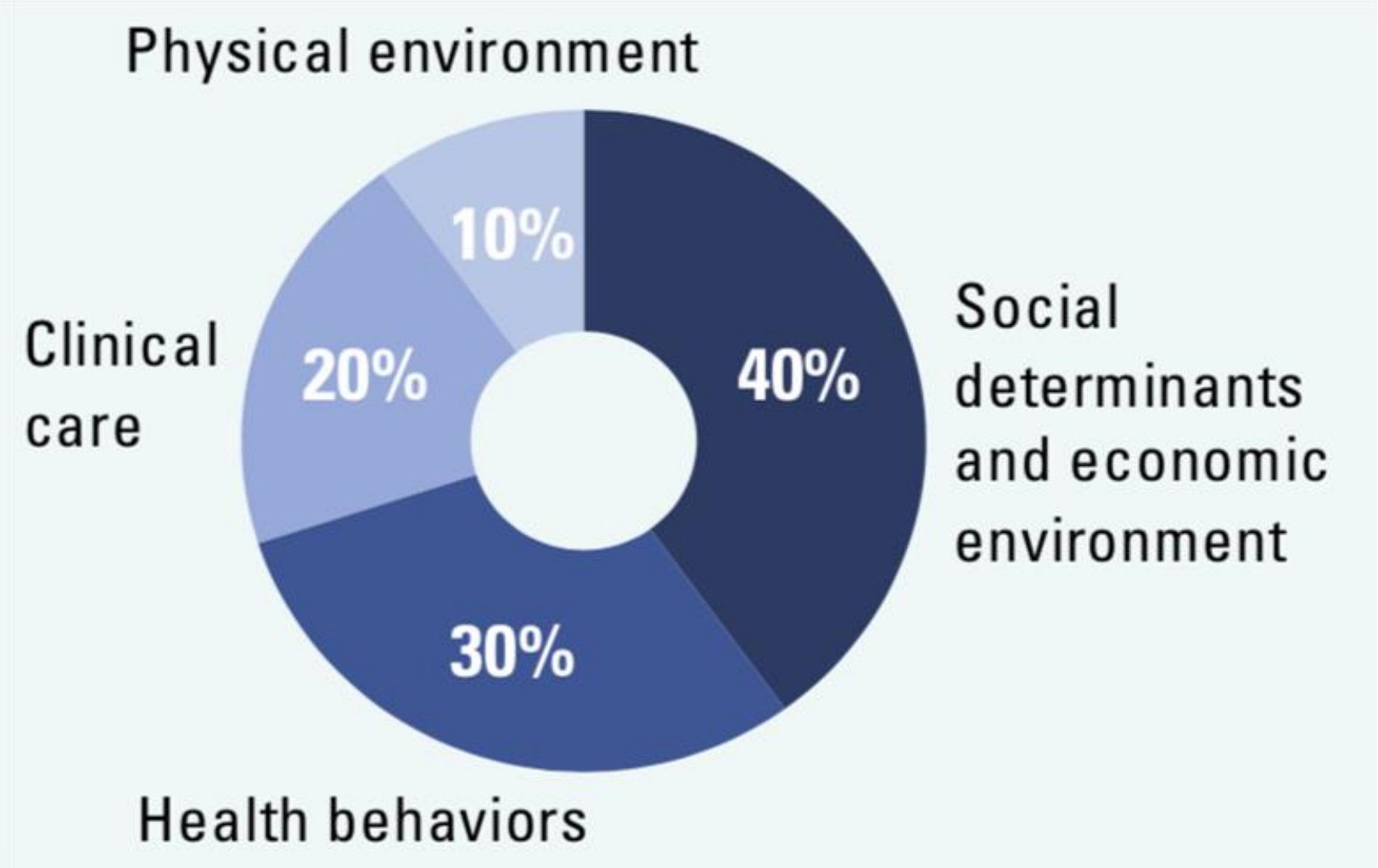
Revised Nov. 2020

New quality metrics needed

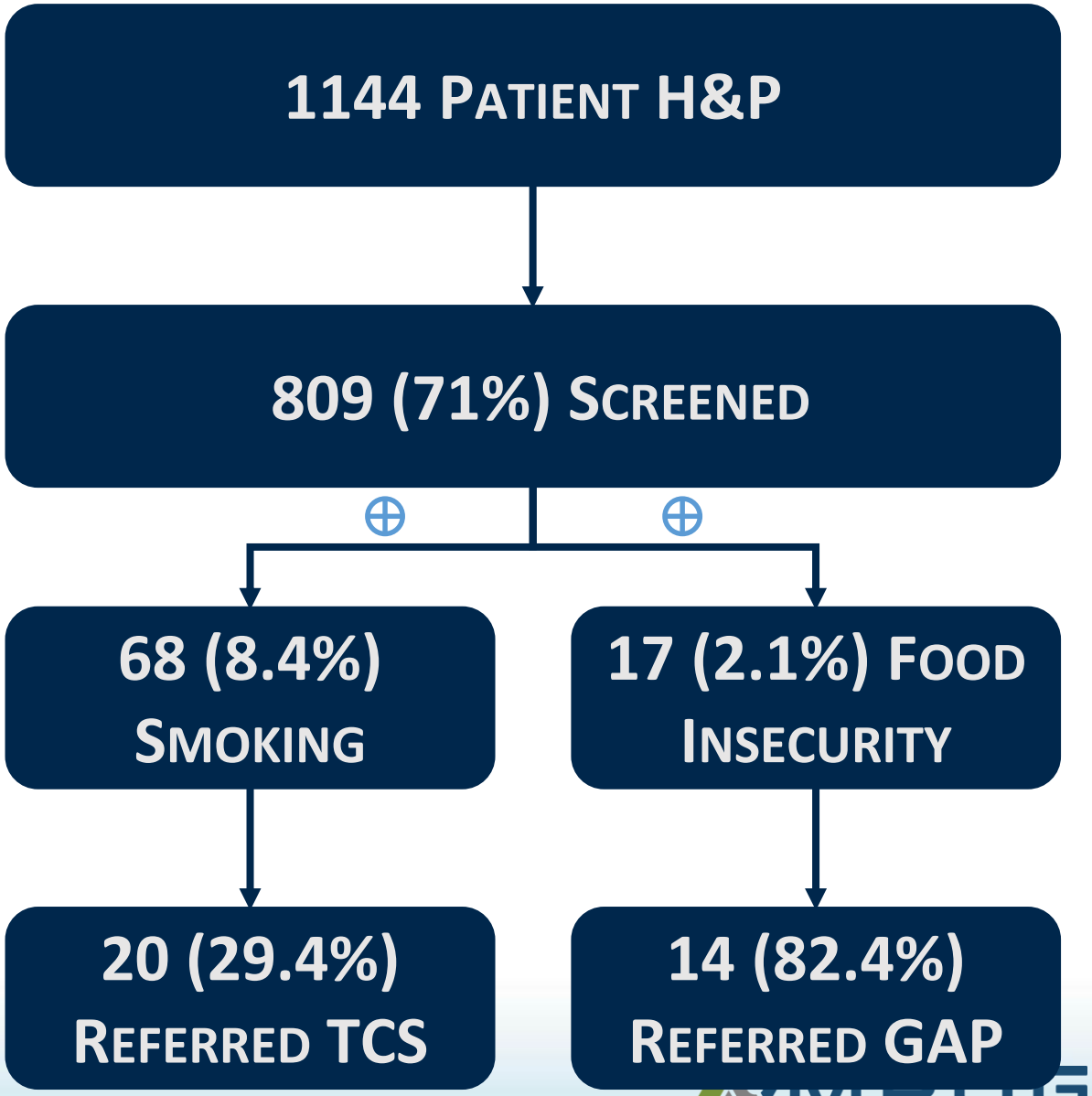
POSITIVE MARGIN FOLLOWING COLORECTAL CANCER SURGERY



What contributes to health?



Pilot
Mar 8 – Mar 26



New quality metrics needed

SUCCESS Study:

Surgical Urinary Catheter Care Enhancement Safety Study

- Stakeholder Advisory Board meeting at 1pm today – Members, please use the Zoom link in your calendar invite
- We are still looking for volunteers to serve on this board which guides this important project. Please contact Jessica Ameling if you are interested: jameling@umich.edu

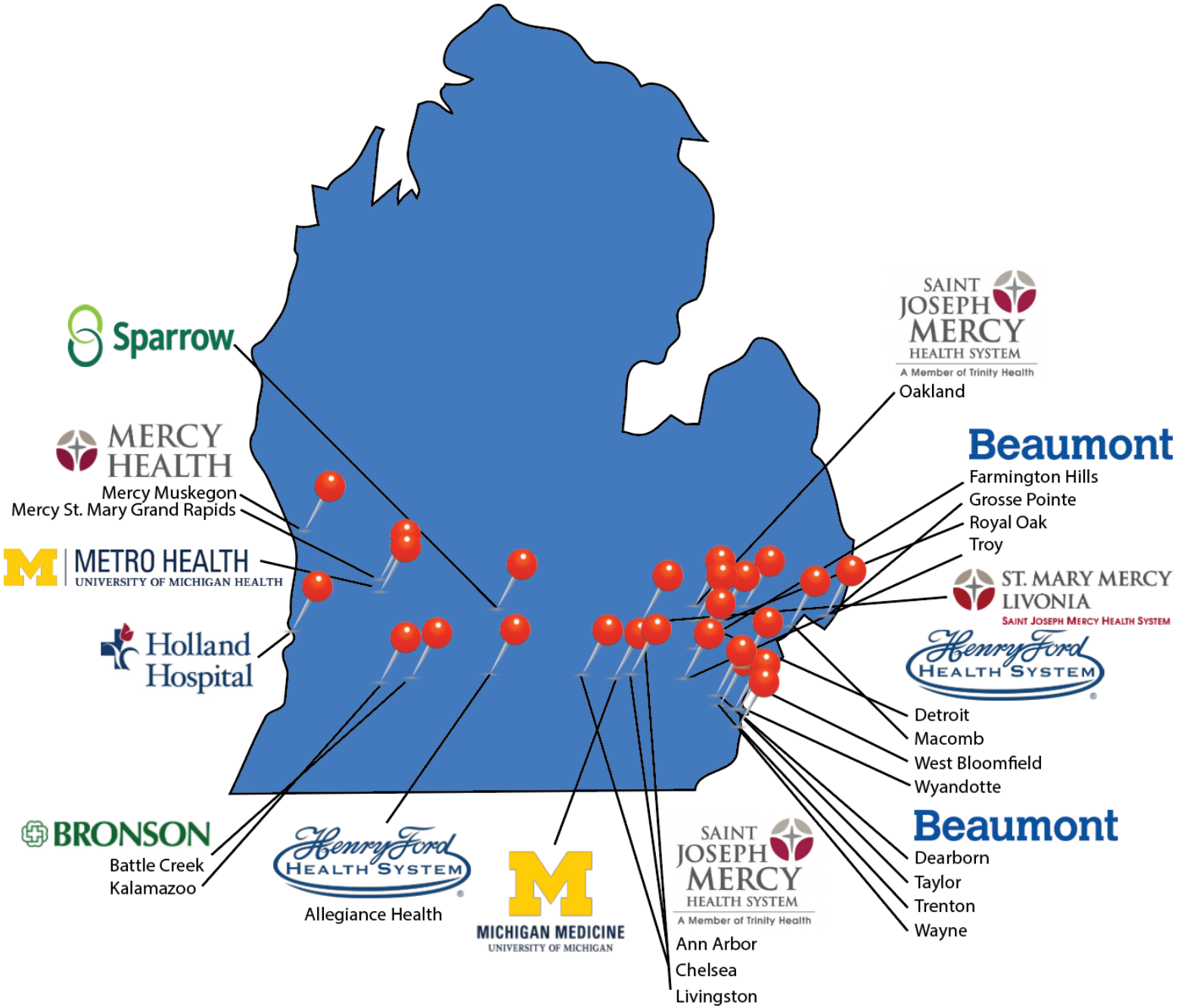
Nirav Shah, MD

ASPIRE Quality Improvement Program Director

MPOG
MULTICENTER PERIOPERATIVE OUTCOMES GROUP

MSQC
Michigan Surgical Quality Collaborative

2021 Michigan Sites



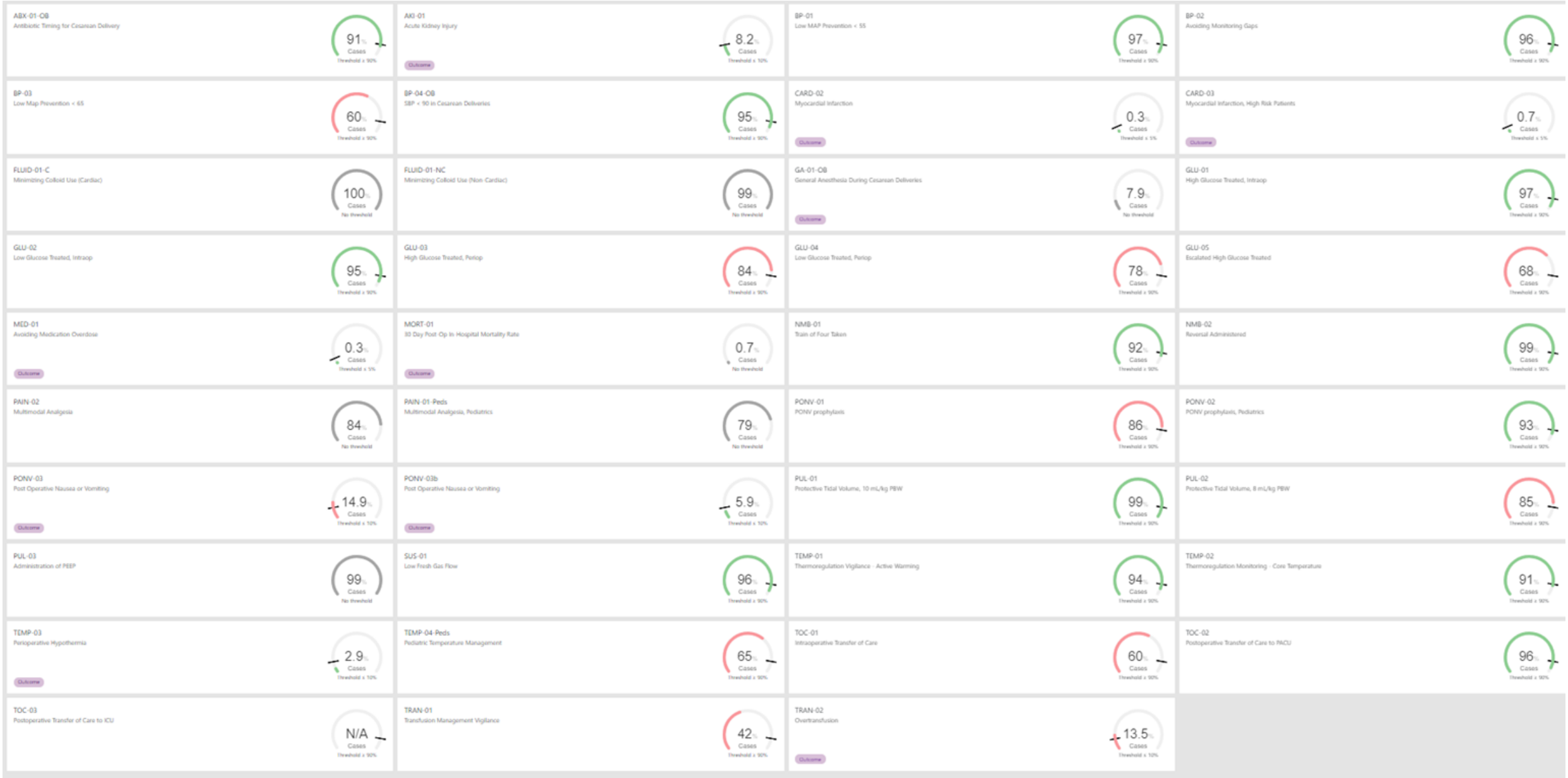
Welcome

Ascension

Spectrum Health

MidMichigan Health
UNIVERSITY OF MICHIGAN HEALTH SYSTEM

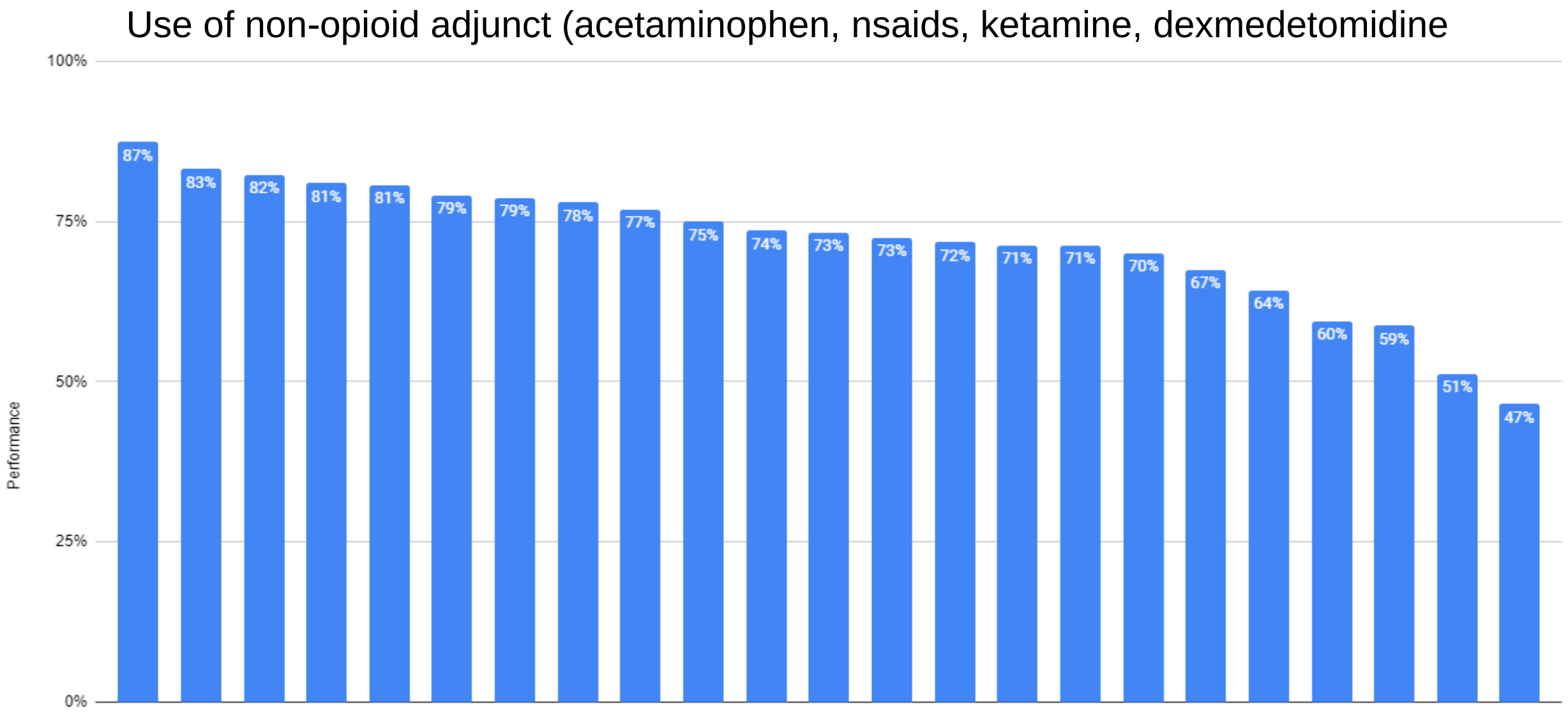
Current measure list on our new QI reporting tool



Your challenge is to pick measures that are relevant to your site and providers

Our challenge is to pick measures that are relevant across site and providers

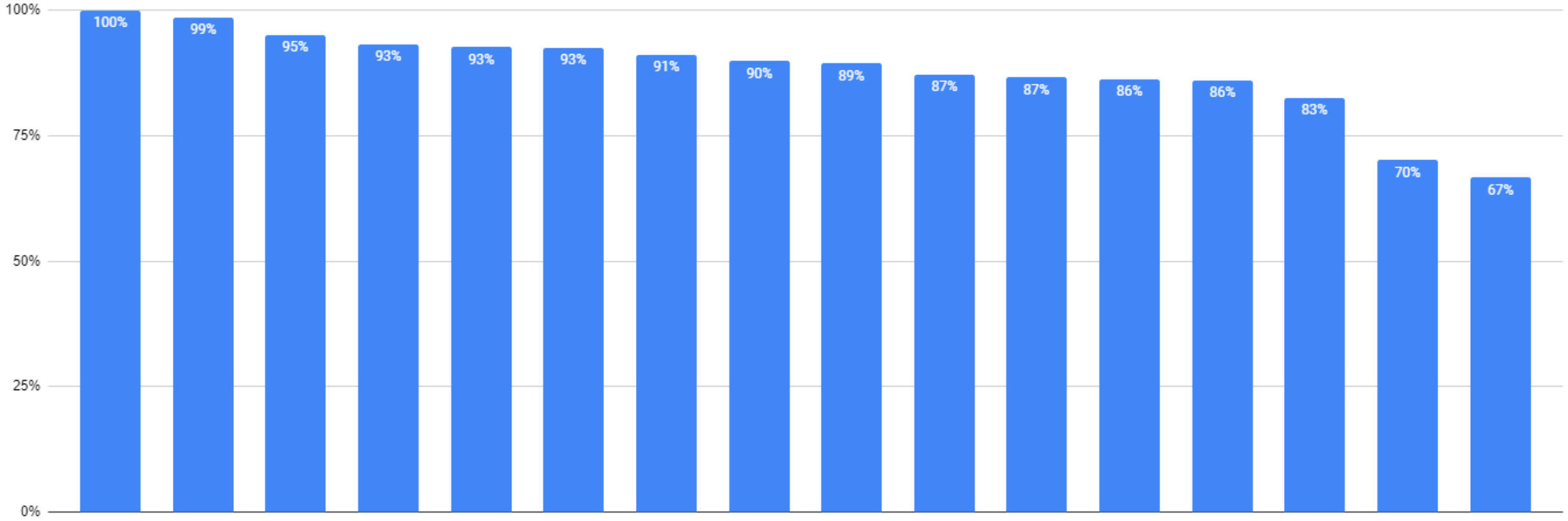
Multimodal Analgesia across MI



Sustainability across Michigan

Decarbonizing the Operating Room
Emily Johnson, BS, MSc, MD Candidate
University of Michigan Medical School

Low fresh gas flow across when using inhalational agent



Association of race or ethnicity with QI measure performance

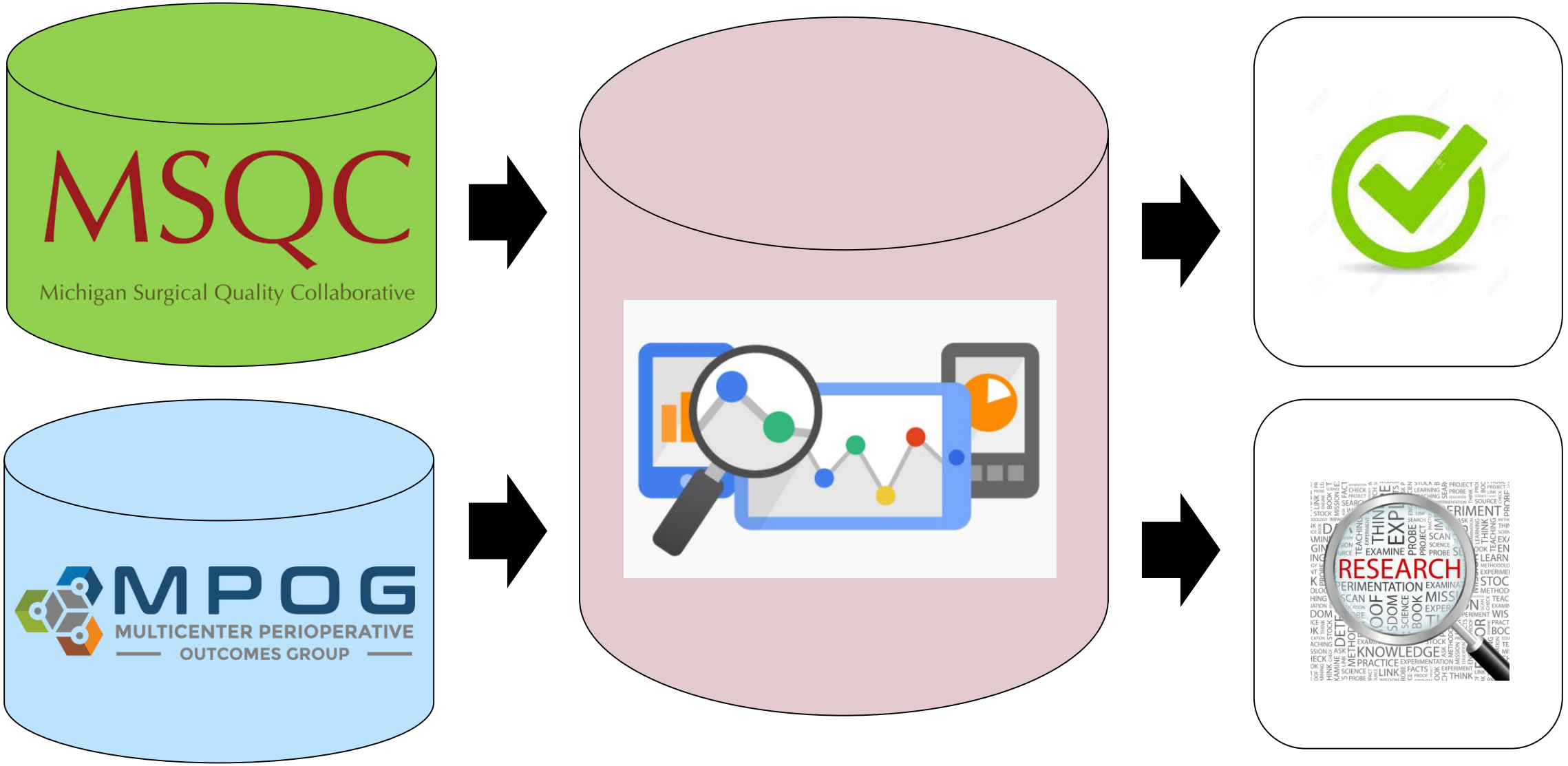
Title of Study or Project:	Is Patient Race or Ethnicity Associated with Adherence to Anesthesiology Quality Metrics?
Primary Institution:	Michigan Medicine
Primary Author:	Nirav J Shah
Co-Authors:	Matthew Wixson, Eric Sun, Michael Mathis; Douglas Colquhoun, Allison Janda, Sachin Kheterpal, Graciela Mentz; Michelle T. Vaughn. Potential collaborators from across MPOG sites.
Statisticians:	Graciela Mentz, PhD; Michelle T. Vaughn, MPH
Type of Study:	☑ Retrospective Observational
IRB Number and Status:	Pending
Hypotheses/Aims:	Most intraoperative anesthesiology processes of care used in ASPIRE have no clinical reason for variation by race or ethnicity. However, previous literature has demonstrated disparities in the use of specific obstetric and pediatric anesthesiology techniques. We hypothesize that among adult patients undergoing non-cardiac surgery, very few, if any, of the current process of care quality measures in ASPIRE will demonstrate a clinically significant variation associated with race or ethnicity.

Welcome to RADAR

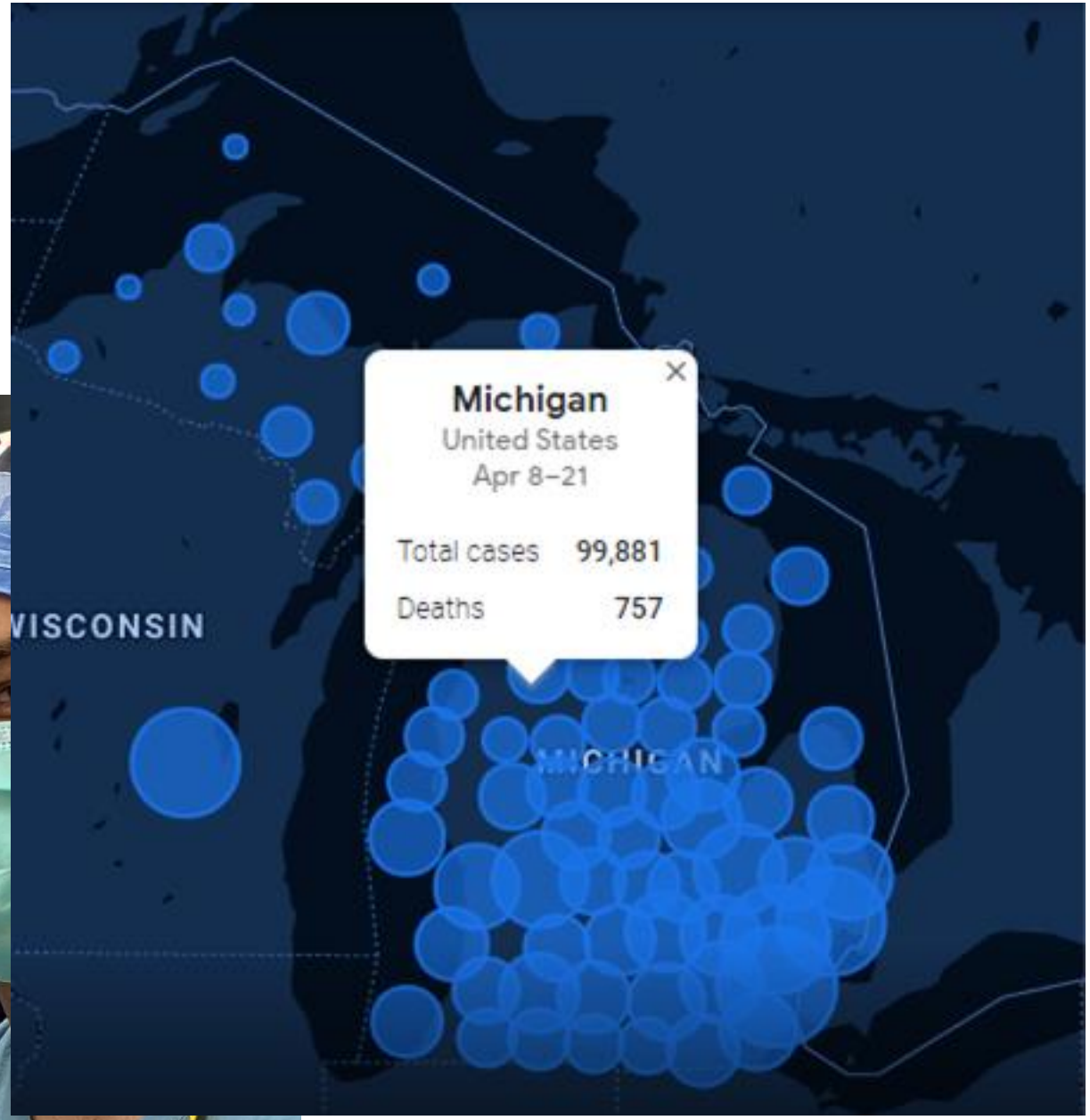
Our vision is a more diverse and inclusive community in academic anesthesiology.

Whether you're a student thinking about a career in medicine, a leader in the field, or somewhere in between, we invite you to explore our website, connect with us at an event, and join us as we lead transformative change in the field.

Still working on an automated linked dataset



Thank you


Michigan
United States
Apr 8–21
Total cases 99,881
Deaths 757
WISCONSIN
MICHIGAN