



MPOG Brain Health/Geriatric Workgroup  
Date: August 21, 2023 3-4p EST  
Via Zoom

# Agenda

- Introductions
- Meeting Goals
- Recap of geriatric/brain health progress
- Proposed Measures (midazolam use)



# Participants

<b>Jeff Jacobs, MD – Cleveland Clinic Florida</b>	<b>Linda Liu, MD – UCSF</b>
<b>Stacie Deiner, MS, MD – Dartmouth-Hitchcock Medical Center</b>	<b>Liz Whitlock, MD – UCSF</b>
<b>Xan Abess, MD – Dartmouth-Hitchcock Medical Center</b>	<b>Phil Vlisides, MD – Univ. of Michigan</b>
<b>Miles Berger, MD – Duke University</b>	<b>Mark Neuman, MD – University of Pennsylvania</b>
<b>Gary Loyd, MD – Henry Ford Health System</b>	<b>Rob Schonberger, MD – Yale/MPOG Associate Research Director</b>
<b>Lucy Everett, MD – Massachusetts General Hospital</b>	<b>Mike Mathis, MD – MPOG Research Director</b>
<b>Germaine Cuff, BSN, PhD – NYU Langone Health</b>	<b>Nirav Shah, MD – MPOG Quality Director</b>
<b>Simon Tom, MD – NYU Langone Health</b>	<b>Rebecca Pantis, M.S. – MPOG</b>
<b>Anne Donovan, MD - UCSF</b>	<b>Tony Edelman, MD – MPOG Associate QI Director</b>
<b>Lee-Lynn Chen, MD – UCSF</b>	<b>Sachin Kheterpal, MD – MPOG Executive Director</b>

# Goals of this meeting

- Ensure all attendees are caught up on conversations and progress over the last couple of years
- Obtain feedback on developing a new measure that demonstrates variation in care with administration of midazolam in the geriatric population
- Determine next steps for this workgroup
  - Continue with ad hoc meetings with correspondence over email
  - Create Basecamp forum to host conversations between meetings?

# What is MPOG?

- ★ Formed in 2008
- ★ > 63 hospitals including private practices and academic institutions
- ★ Data at the coordinating center is transformed for use in education, research, and quality improvement
- ★ We currently have 76 quality measures

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Check out the Featured Anesthesiology Journal Podcast with Dr. Robert White on Racial Disparities in Antiemetic Administration

MORE INFO

Featured Author Podcast: Racial Disparities in Antiemetic Administration  
Anesthesiology Journal's podcast

Listen on Apple Podcasts

Trusted Evidence: Discovery to Practice

## Our Mission

Our mission is to promote safe and evidence-based perioperative care for all patients through collaboration, research, education, and quality improvement.

Please [join us](#) on our mission.



23

Million  
Cases



390

Million  
Medication  
Records



51

Billion  
Physiologic  
Observations

# Recap of Progress Thus Far...

- Email conversation initiated in August 2020 with interest in studying periop delirium
- Identified variables present in EHR across MPOG sites -> developed MPOG Concepts to capture preop cognitive assessments & postop delirium screening
- Met several times from Fall 2020 - Winter 2021
- Presented update at [July 2021 Quality Committee](#) meeting
- PCRC 0170 approved in 07/2022, study team led by Xan Abess (Dartmouth) in - *Pragmatic perioperative brain health screening in older surgical patients*

# MPOG Data

- Between 01/01/2018 - 7/31/2023:
  - 22,545,381 total cases from 71 institutions
  - 6,813,186 cases with patient age >65 across 70 institutions
- More than 60 brain health MPOG concepts now available!

MPOG Delirium Concepts (See <a href="#">Browser</a> for complete list)	Institutions	Occurrences
Cognition Assessment	17	2,162,398
Clock-Drawing Test – Score	9	23,469
Montreal Cognitive Assessment (MoCA) - Score	6	45,920
Cognitive Screening: MoCA Total Score	2	207,151
Confusion Assessment Method (CAM) - Overall CAM-ICU Score	4	58,063
Confusion Assessment Method (CAM) Score	26	2,067,098
AD8 – Total score	0	0
4AT – Total Score	0	0
Hopkins Frailty- Score	2	2,663

# Recommendations for Variable Mapping

## Preop

- Cog screening: AD8, MMSE, MOCA, MiniCog
- Frailty screening: Clinical Frailty Scale, Frail Scale, CSHA Frailty Index

## PostOp

- Delirium screening: 4AT, CAM, CAM-ICU

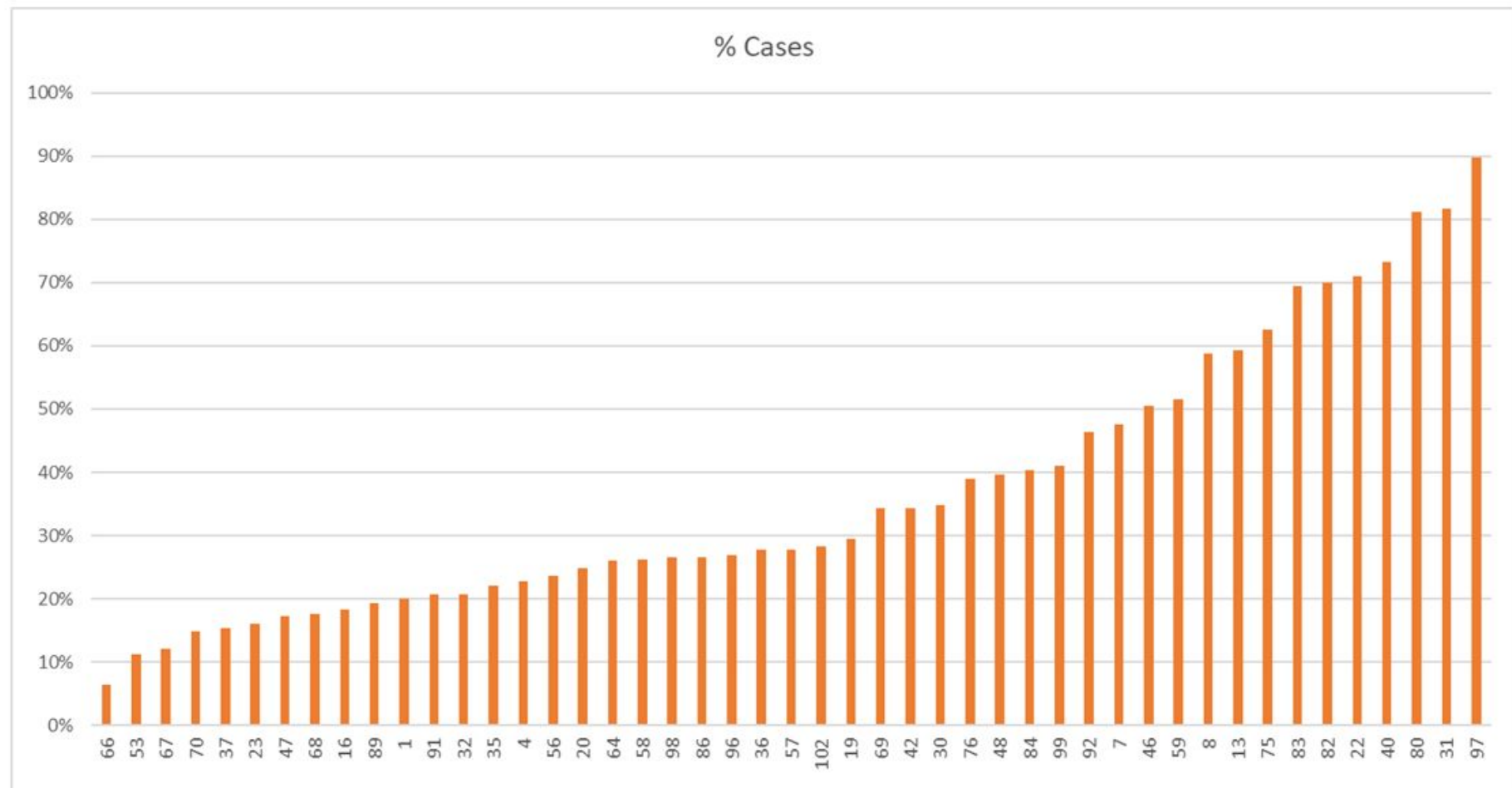
\*MPOG only captures data 4 hours before anes start through PACU or 6 hours after anesthesia end.



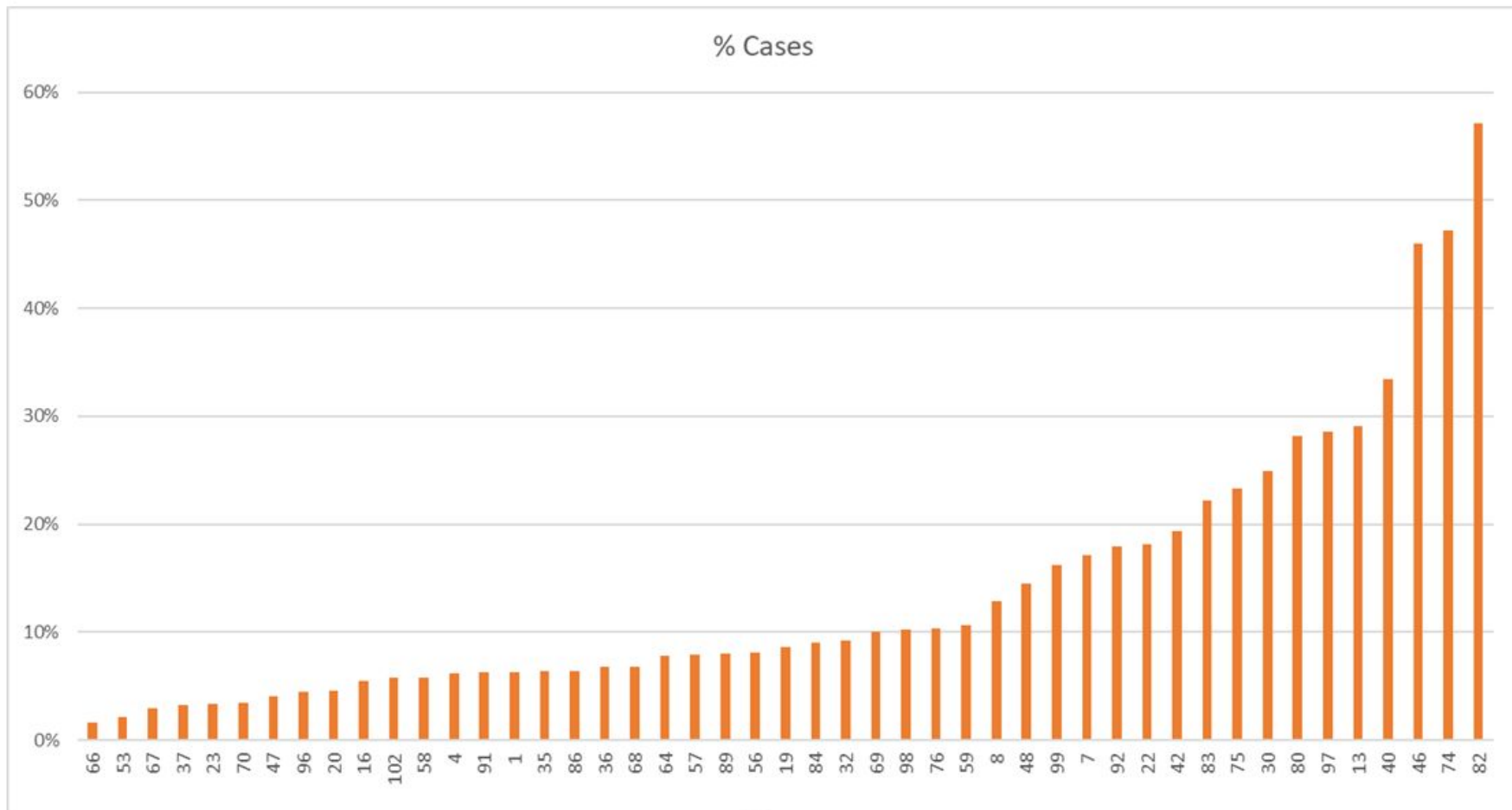
# Measures of interest

- **% of patients age >X undergoing non-cardiac GA who received a midazolam intraoperatively**
- % of patients age >65 without preoperative hypotension undergoing GA for non-cardiac surgery who had episode of MAP <55 mmHg within 15 minutes of induction (adaptation of BP-05)
- % of patients screened preoperatively for cog impairment
- % of patients screened preoperatively for frailty
- % of patients screened postoperatively for delirium
- % of patients age >X undergoing GA with ETT who received more that 1.5mg/kg of single propofol dose for induction
- % of patients requiring sugammadex for rescue following full reversal by neostigmine/glycopyrrolate

## Use of preoperative midazolam across MPOG (Age 70-79)



## Use of preoperative midazolam across MPOG (Age 80-89)



# Proposed midazolam measure

- ❖ Midazolam use in patients in geriatric population
- ❖ Informational only (no threshold)

# MED-03

- ❖ **Description:** Percentage of geriatric patients who (do not) receive a benzodiazepine
- ❖ **Threshold:** Not applicable - Informational only
- ❖ **Measure time period:** Pre-op start time - Anesthesia End

# MED-03

## ❖ **Inclusion:**

- Geriatric patients who undergo procedures requiring general anesthesia

## ❖ **Exclusions:**

- ASA 5 & 6 cases
- Patients <65 y/o?
- Others?

# MED-03

## ❖ **Success Criteria:**

- No midazolam / benzodiazepine administered

## ❖ **Provider Attribution:**

- All anesthesia providers signed in at Anesthesia Start?
- All anesthesia providers signed in at Anesthesia End?
- Providers signed in when midazolam administered?

# Voting questions

- ❖ Should MPOG build a measure for midazolam administration in the geriatric population?
  - Yes
  - No
- ❖ Which age range among the geriatric population should be included?
  - > 65
  - > 70
  - >75
  - <80

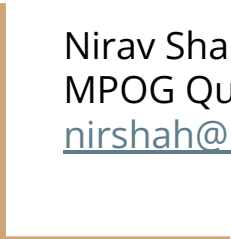


# Next Questions and Steps

- Should we recommend specific assessments for preoperative frailty / cognition, or postoperative delirium in the PACU?
- Should we build a measure that tracks rates of PACU delirium screening in the PACU, knowing that it's going to be low?
- Are there experts in addition to this group that we want to hear more from at MPOG meetings?
- Continue progress on PCRC 0170
- Consider additional research projects
- Continue to recommend sites to map Brain Health concepts



# Thank you!



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