ASPIRE Obstetric Anesthesia Subcommittee Meeting

September 10, 2025

Agenda

- Announcements
- May meeting recap
- In the News
- Obstetric Phenotypes Updates
- Antibiotic (ABX) Measure Updates
- General Anesthesia Definition for Obstetrics
- New Measure Build Updates

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Announcements

Future Meeting Dates:

- MPOG OB Subcommittee
  - December 3, 2025, at 1pm EST

Welcome to new OB Subcommittee members!

- 24 new members joined since the last meeting held in May

The OB Subcommittee is open to anyone, if interested in attending, please email Kate.

May Meeting Recap

- Reviewed results of the WOMAN-2 Trial relative to tranexamic acid use
- Voted **not** to include midazolam as an antiemetic for PONV-05 (Adult PONV Prophylaxis measure)
- Discussed & voted on OB Subcommittee Measure Priorities. Will focus on the following topics to develop measures in 2025-2026:
  - **Unintended dural puncture**
  - **Epidural replacement**

In the News

[Evidence-based clinical practice guidelines on postdural puncture headache: a consensus report from a multisociety international working group]

Uppal et al. 2024

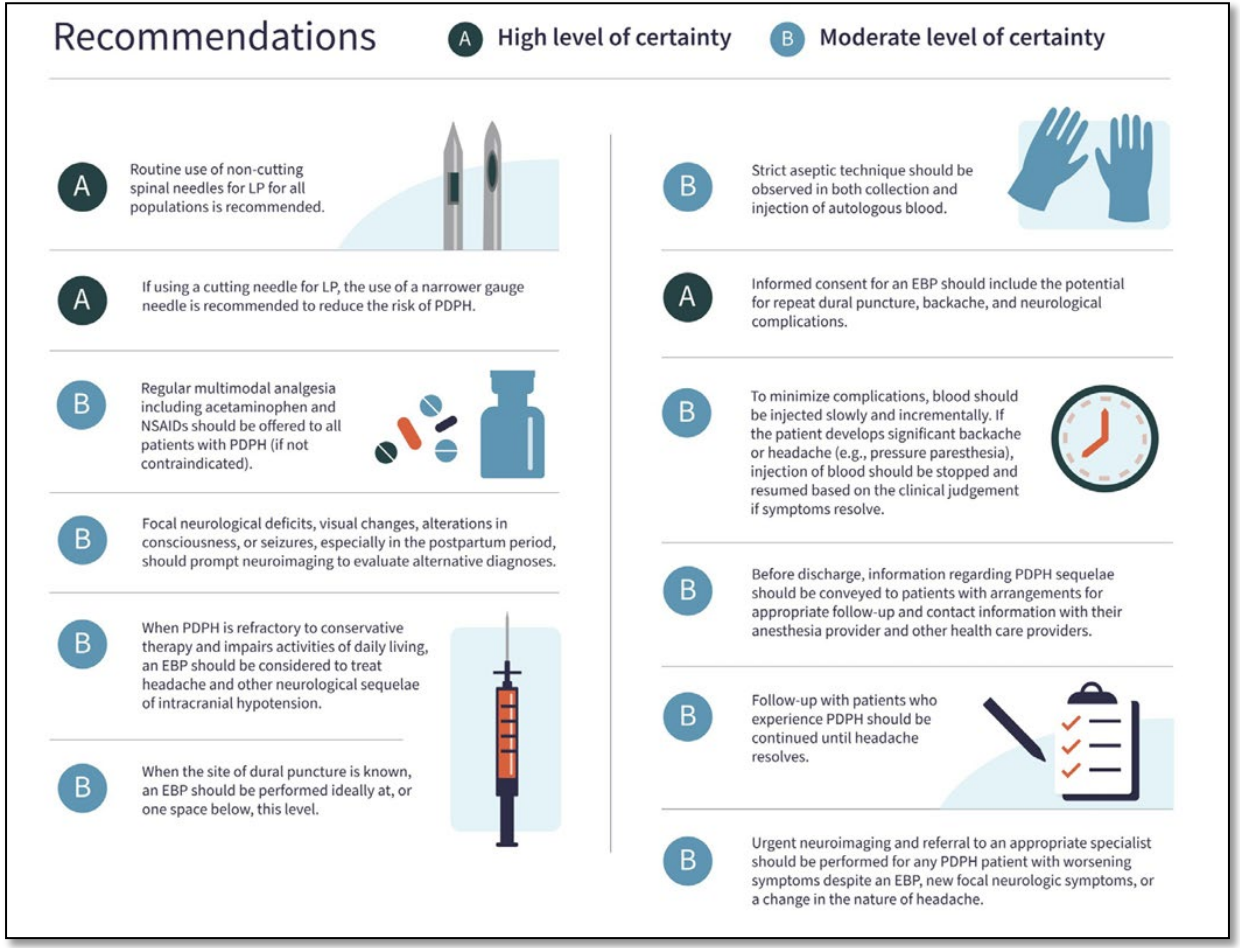

Image source: Uppal et al. 2024

Obstetric Phenotypes Update

Recently released an Obstetrics Delivery - Date/Time phenotype - helpful first step to build upon for the 'Pregnancy' phenotype

- Date/Time of Delivery phenotype now returns the date and time of a cesarean or vaginal delivery
- Only considers ages 12-56
- Limited concepts evaluated

- Version 2 in progress – more updates to come!

Hierarchy	Concept ID	Concept Description
1	50358	Obstetrics- delivery of neonate
2	50189	Obstetrics- Delivery of Neonate 2
3	50361	Obstetrics - Vaginal delivery note
4	50362	Obstetrics - Vaginal Delivery in/out of OR detail
5	50357	Obstetrics - Uterine Incision
6	50369	Obstetrics - Delivery of Placenta
7	50359	Obstetrics- Apgar score checked at 1 minute note
8	50360	Obstetrics- Apgar score 1 minute detail
9	50373	Obstetrics - Apgar score checked at 5 minute note
10	50374	Obstetrics- Apgar score at 5 minute detail
11	50596	Obstetrics- labor continued as c-section

Pregnancy Phenotype: In-progress

Developing an 'Obstetric – Is Pregnant' phenotype

Proposed Update:

- Primary Result: Pregnancy – Likely Pregnant/Not pregnant/Postpartum/UTD
- Secondary Result: Number of days before or after delivery

Value	Value Code	Definition
Unable to Determine	-999	No delivery found in MPOG
Not Pregnant or postpartum	0	Delivery found in MPOG, procedure occurred >42 weeks before the delivery date or >12 weeks after the delivery date
Likely Pregnant	1	Delivery found in MPOG <= 42 weeks after procedure
Postpartum	2	Delivery found in MPOG, procedure occurred <=12 weeks after delivery

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Case Examples

Enumerations:
-999 = No delivery found in MPOG.
0 = Not Pregnant or postpartum (Delivery found in MPOG >42 weeks before delivery OR >12 weeks after delivery)
1= Likely Pregnant (Delivery found in MPOG ≤42 weeks after procedure)
2= Postpartum (Delivery found in MPOG, procedure occurred ≤12 weeks after delivery)

Cholecystectomy
11/1/2023
Pregnant Phenotype Result: 0
Days before delivery: -335

ORIF – Femur
8/1/2024
Pregnant Phenotype Result: 1
Days before delivery: -61

Labor Epidural w/ Vaginal Birth
10/1/2024
Pregnant Phenotype Result: 1
Days before delivery: 0

Appendectomy
11/1/2024
Pregnant Phenotype Result: 2
Days after delivery: +31

What is the appropriate threshold for "likely pregnant"?

- Currently set at 42 weeks. Should we decrease the window to 39 or 40 weeks?
- Conceptional age is 2 weeks shorter than gestational age
  - Obstetric gestational age is calculated from the first day of a woman's last menstruation, not the date of conception, conception occurs ~14 days after a woman's last menstruation
  - This is a historical term dating back to the 19th century, based upon a 28-day ovulation cycle
  - Gestational age, duration of time from last menstruation to birth: 40 weeks at full term
  - Fetal age (conceptional age), fertilization to birth: 38 weeks at full term
- In 2023, 4.97% of birth occurred at GA ≥ 41 weeks (CDC)
- Median and mode gestational age is 39 weeks (PMID 37067897)

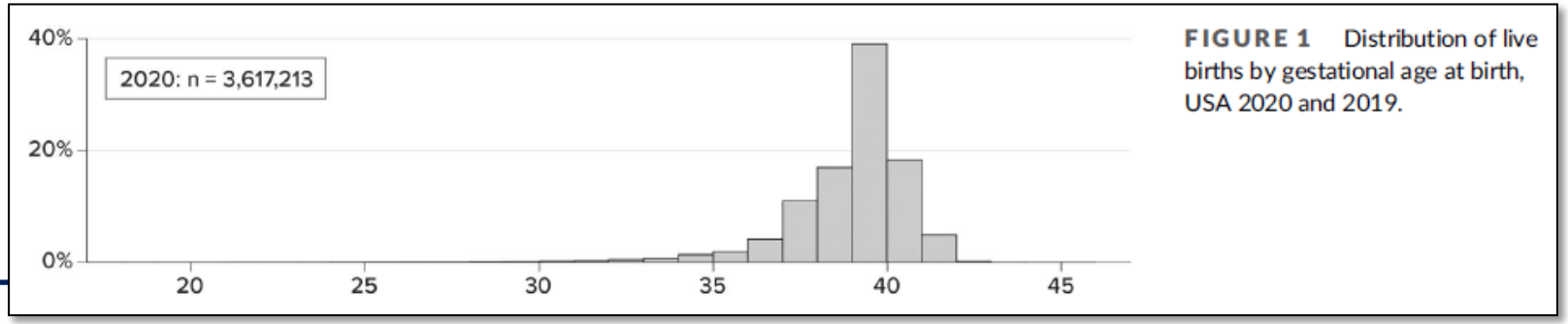


FIGURE 1 Distribution of live births by gestational age at birth, USA 2020 and 2019.

ABX Measure Updates

- Recently published updates to ABX-01-OB to align azithromycin administration to 60 minutes prior to surgical incision through surgical incision.
  - Score changes minimal
  - Previously, success criteria specified that all other antibiotics be administered prior to surgical incision except azithromycin.
  - Measure now aligns with ABX-06-OB success criteria
- Updated ABX-06-OB measure time period to 60 minutes prior to surgical incision or procedure start.
  - Score changes minimal for most sites
  - A few sites decreased scores ~30% due to no documented surgical incision or procedure start time
  - Cases without surgical incision or procedure start time will now be flagged for review.
  - Uterine incision no longer considered in the measure start time logic

General Anesthesia Definition for Obstetrics

- General Anesthesia measures for cesarean delivery (GA-01, GA-02, GA-03) are currently defined using the Anesthesia Technique: General phenotype
- All cases resulting a value >0 considered as 'general anesthesia' (standard MPOG definition of GA)
- If inhaled agent alone is administered (no airway, no propofol infusion, no NMB), should this be considered GA for cesarean delivery?

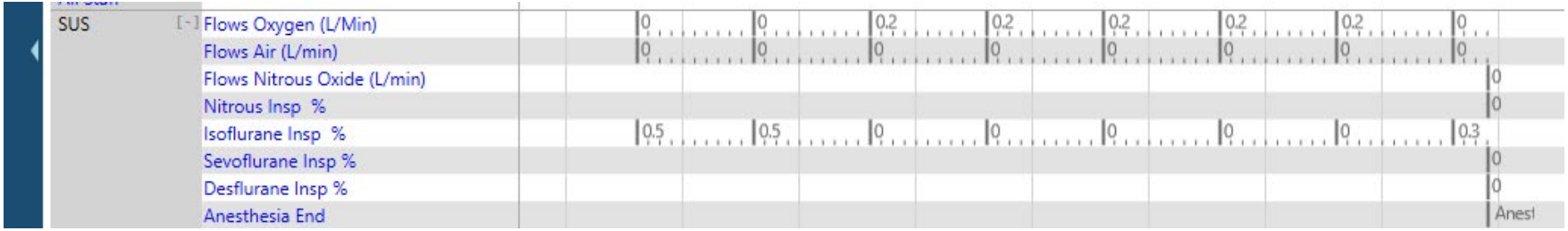
Enumeration

Value	Value Code	Definition
Invalid Value	-998	The case is missing either Anesthesia Start or Anesthesia End
No	0	No general, ETT, or LMA note and no sedative medications or inhaled anesthetics or paralytics associated with the case.
General - both ETT and LMA	1	There were ETT and LMA notes associated with this case.
General - ETT	2	There was at least one ETT note, with another general or ETT note associated with this case. There were no LMA notes.
General - LMA	3	There was at least one LMA note, There were no ETT notes.
General - Inhaled Anesthetic Only	4	There were inhaled anesthetics associated with this case. There were no ETT or LMA notes.
General - Neuromuscular Blocker Only	5	There were neuromuscular blockers associated with this case. There were no ETT or LMA notes.
General - Unknown	6	There were both neuromuscular blockers and inhaled anesthetics associated with this case along with ambiguous general airway notes

Case Example #1

Isoflurane ‘on’ but no fresh gas flow running – patient not receiving inhaled agent

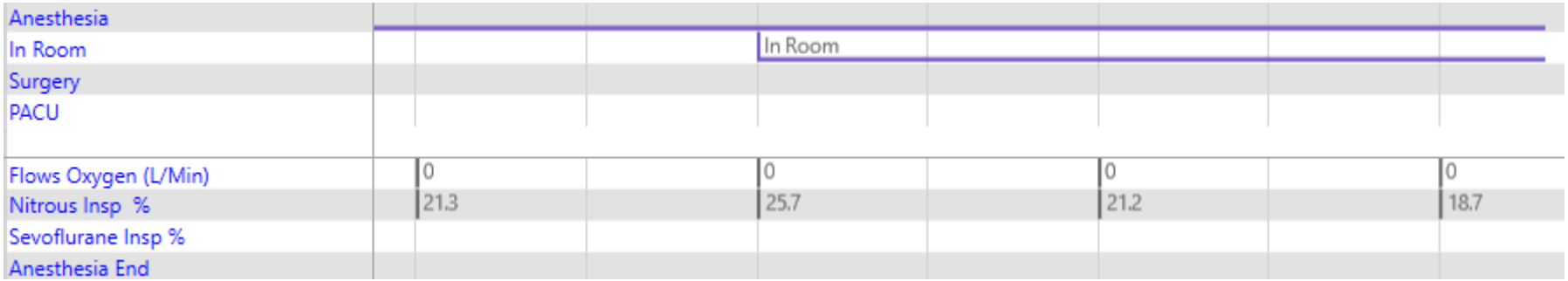
- Currently will flag for GA-OB measures
- Minimally, need to add a check for FGF
- Consider excluding all cases that *only* have inhaled agent running from being considered as GA



Case Example #2

Nitrous administered at the beginning of the cesarean delivery portion of the case

- Will currently flag for GA-OB measures
- Exclude cases that *only* have inhaled agent running from being considered as GA (no airway placed, NMB, or TIVA)?



General Anesthesia Definition - Vote

If inhaled agent alone is administered (no airway, no propofol infusion, no NMB), should this be considered GA for cesarean delivery?

a) Yes, administration of any inhaled agent should be considered GA. (artifact values removed)

b) No, if nitrous oxide (alone) is administered, it should not be considered as GA. All other inhaled agents (iso, des, sevo) should be considered as GA. (artifact values removed)

c) No, inhaled agents alone should not be considered as GA.

Recap of Measure Build Priority Discussion

At the last meeting, subcommittee members ranked the following measure options:

1. **Epidural Replacement:** Proportion of patients that require a second neuraxial procedure prior to delivery
2. **Core Temperature:** Proportion of patients undergoing cesarean delivery with at least one core body temperature measured
3. **Multimodal Pain:** Proportion of patients administered at least two non-opioid adjuncts preoperatively or intraoperatively
4. **Inadequate pain control:** Proportion of patients undergoing cesarean delivery with inadequate anesthesia (supplemental analgesia)
5. **Accidental dural puncture**: Proportion of patients receiving neuraxial labor analgesia with an unintentional dural puncture

Each measure was assigned a ranking between 1-5: 1 = Low priority -> 5 = High priority

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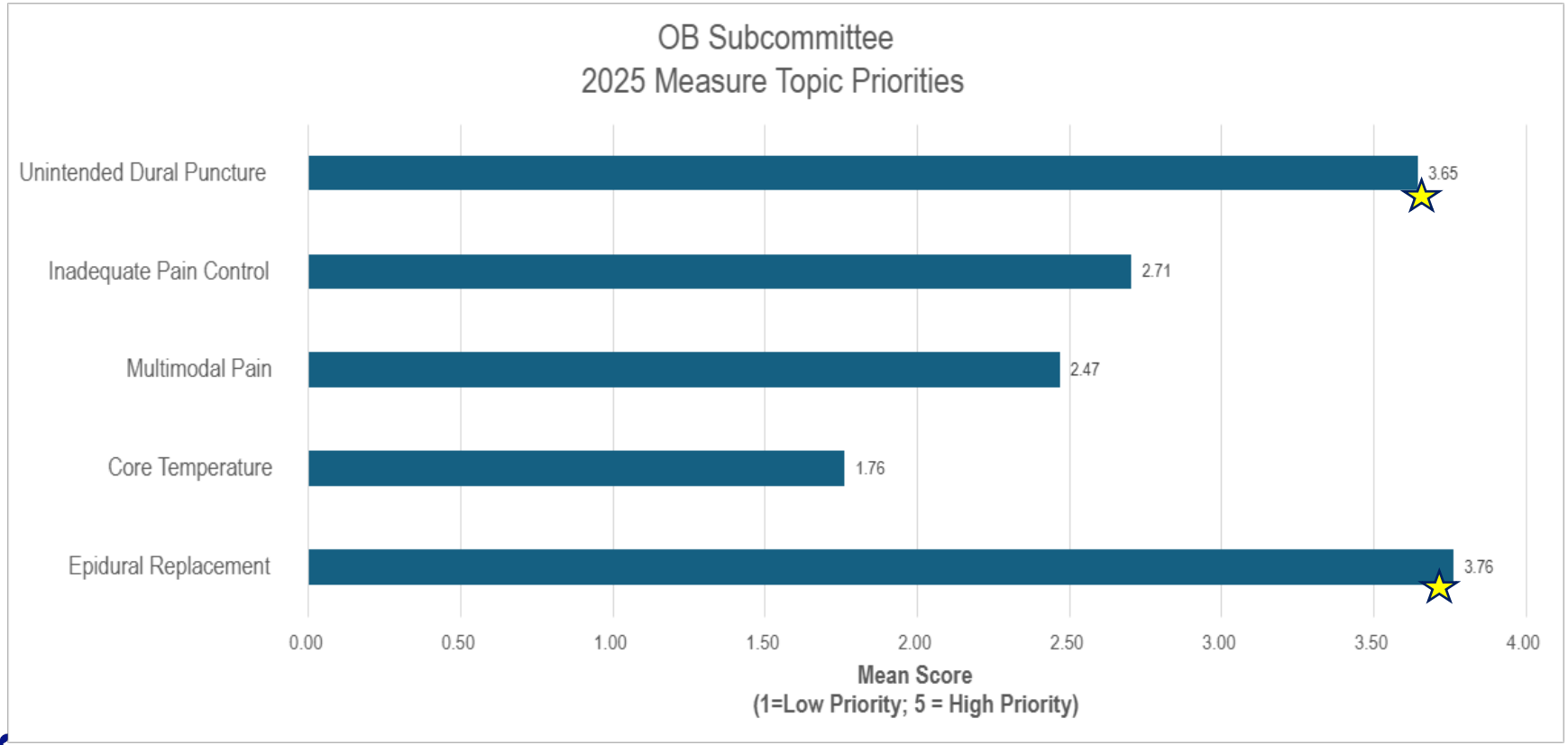
2025 Measure Build Vote Results



Next Steps

1. Review specifications for Epidural Replacement and Unintended Dural Puncture measures.
2. Discuss modifications needed to each specification.
3. Updated specification will be sent to MPOG programmer to update measure code.
4. Measure results re-validated.
5. Share findings with subcommittee to decide if modifications are needed.
6. Additional modifications to measure specification/code per subcommittee recommendation. Additional validation is needed if code is modified.
7. Publish measure.

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UDP-01-OB: Unintended Dural Puncture

Description: Percentage of patients undergoing neuraxial epidural anesthesia for an obstetric procedure with evidence of an unintended dural puncture.

Threshold: ≤ 2%

Available for Provider Feedback Emails: No - Departmental Only

Measure Time Period:

Obstetric Neuraxial Anesthesia Start to 14 days after Obstetric Neuraxial Anesthesia Start

Success: Neuraxial epidural anesthesia administered without evidence of unintended dural puncture.

UDP-01-OB Inclusion Criteria

All patients requiring neuraxial anesthesia for one of the following obstetric procedures:

- **Childbirth** (includes both labor epidurals and cesarean deliveries as determined by Obstetric Anesthesia Type value codes >0)
- **Postpartum Tubal Ligation**
  - Surgical CPT: 58600, 58605, 58611, 58615, 58661, 58670, 58671
  - Anesthesia CPT: 00851
- **External Cephalic Version**
  - Surgical CPT: 59412
  - Anesthesia CPT: 01958
- **Transvaginal Cerclage Placement**
  - Surgical CPT: 59320
  - Anesthesia CPT: 00948

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Neuraxial Inclusion Criteria

- The following neuraxial procedures are considered for this measure:
  - Combined Spinal Epidural
  - Epidural
  - Caudal
  - Multiple (will likely include cases with spinal + epidural or unclear documentation)

- The following neuraxial procedures are NOT considered for this measure:
  - Spinal
  - Neuraxial – Unknown Type (neuraxial procedure performed but MPOG is unable to determine type)

UDP-01-OB Exclusion Criteria

Excludes:

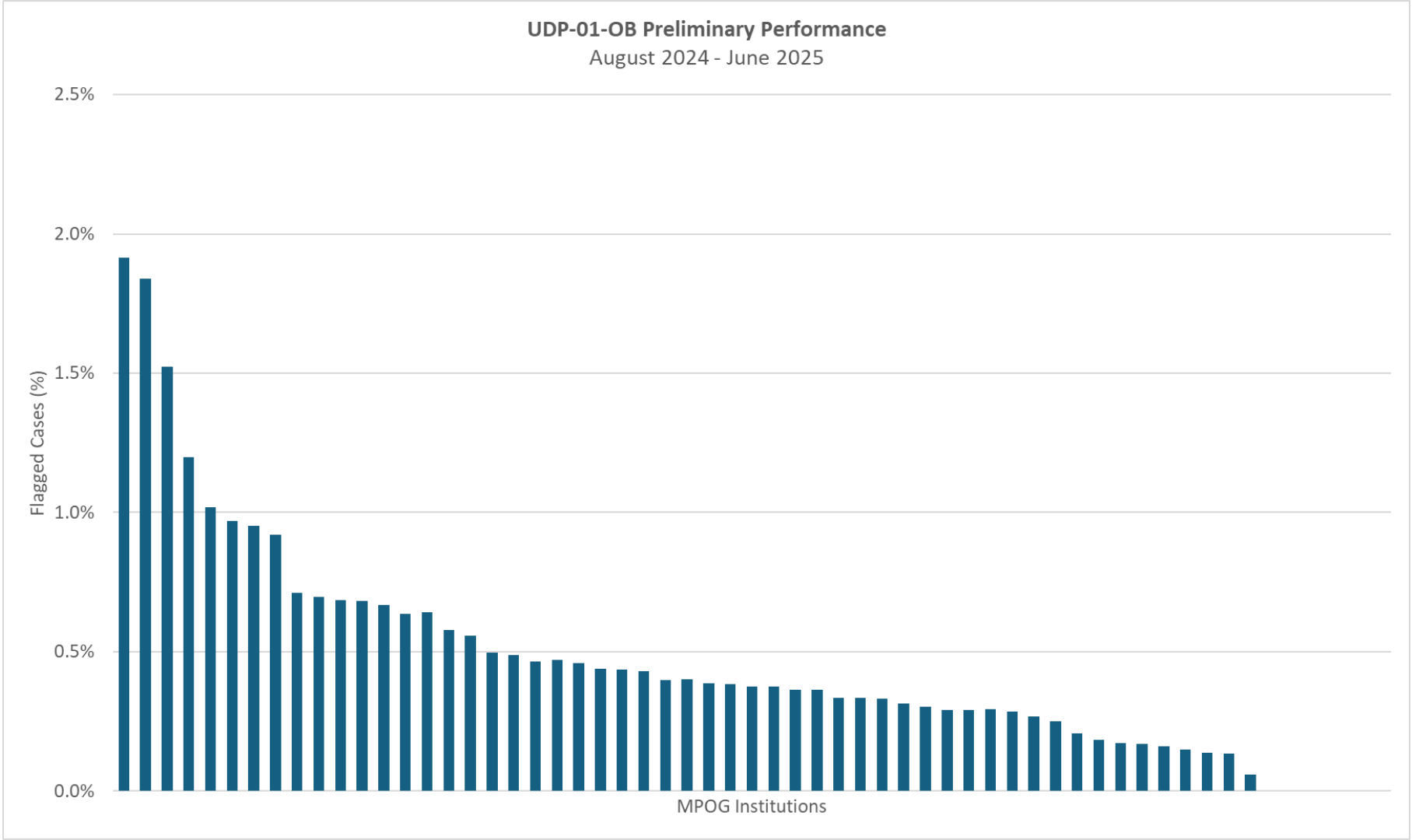
- Patients receiving epidural anesthesia for non-obstetric indications
- Patients not receiving epidural anesthesia (as determined by Anesthesia Technique: Neuraxial value code 0- None)
- Patients receiving spinal or neuraxial technique is unknown (as determined by Anesthesia Technique: Neuraxial value codes 3-Spinal or 5-Unknown Type)
- Obstetric cases with neuraxial start time documented after anesthesia end

Other exclusions to consider?

UDP-01-OB Logic for determining UDP

Documentation of inadvertent dural puncture includes any of the following:

- Inadvertent dural puncture (ID: 50291) documented on the case
- Epidural Blood Patch (ID: 50507) documented on a subsequent case within 14 days after initial procedure
- A secondary case for Epidural Blood Patch (CPT: 62273) is found in MPOG within 336 hours (14 days) of neuraxial procedure start for the initial obstetric case where a neuraxial procedure was performed.
- ICD-10 codes:
  - G96.0 Cerebrospinal fluid leak, unspecified
  - G97.0 Cerebrospinal fluid leak from spinal puncture
  - G97.41 Accidental puncture or laceration of dura during a procedure
  - O74.5 Spinal and epidural anesthesia-induced headache during labor and delivery
  - O89.4 Spinal and epidural anesthesia-induced headache during the puerperium
- ICD-9 code: 349.31 Accidental puncture or laceration of dura during a procedure


UDP-01-OB Preliminary Performance
August 2024 - June 2025
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
Flagged Cases (%)
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Discussion

- When there are multiple cases with neuraxial anesthesia within a 14-day window, difficult to accurately attribute the unintended dural puncture to the correct neuraxial technique.
  - If there is documentation of inadvertent dural puncture for a case, that case will be flagged and any other case within 14-day period will pass.
  - If UDP is determined based on diagnosis code or epidural blood patch, only the first case with a neuraxial procedure will be flagged.
  - Is this appropriate?
- For this reason, should be measure be departmental only with no provider attribution assigned?

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NCR-01-OB: Neuraxial Catheter Replacement for OB

Description: Percentage of patients undergoing neuraxial anesthesia for labor or cesarean delivery with evidence of neuraxial catheter replacement.

Threshold: ≤6%

Measure Time Period:

Obstetric Neuraxial Anesthesia Start to Obstetrics Delivery Date/Time*

*If Obstetrics Delivery Date/Time is not available, will default to anesthesia end.

Success: Epidural anesthesia administered without evidence of a second epidural placement procedure for the same obstetric delivery.

NCR-01-OB Inclusion Criteria

All patients requiring neuraxial catheter anesthesia for childbirth (includes both labor epidurals and cesarean deliveries as determined by Obstetric Anesthesia Type value codes 1, 2, 3, 5, 6, or 7) with neuraxial anesthesia (as determined by Anesthesia Technique: Neuraxial value codes 1 [CSE], 2 [Epidural], 4[Caudal], & 6 [multiple neuraxial techniques]

	Value	Value Code	Definition
✗	No	0	Case did not have any Obstetric Anesthesia CPT codes (actual or predicted) - 01961, 01967 and/or 01968
✓	Conversion (Labor epidural and cesarean delivery combined)	1	Case was a Labor Epidural that later converted to a Cesarean Delivery. Both the labor epidural and cesarean delivery portions are under one Case ID
✓	Cesarean Delivery	2	Case was a standalone Cesarean Delivery without a preceding labor epidural case
✓	Labor Epidural	3	Case was a Labor Epidural that completed without the occurrence of a Cesarean Delivery
✗	Cesarean Hysterectomy	4	Case was a Cesarean with a Hysterectomy
✓	Obstetric Case, Unable to Determine Type	5	Case had an Obstetric Anesthesia CPT code (actual or predicted) - 01961, 01967 and/or 01968, but the algorithm was not able to determine which type of obstetric case it is
✓	Conversion (labor epidural portion)	6	Case is a labor epidural. The same patient has a cesarean delivery case within 24 hours after this case.
✓	Conversion (cesarean delivery portion)	7	This case is a cesarean delivery. The same patient has a labor epidural case within 24 hours before.
✗	Conversion (Cesarean Hysterectomy Portion)	8	Case is a cesarean hysterectomy. The same patient has a labor epidural case within 24 hours before.

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NCR-01-OB Exclusion Criteria

Excludes:

- Cesarean hysterectomy (as determined by Obstetric Anesthesia Type value codes 4 & 8)
- Patients receiving neuraxial anesthesia for any procedure other than labor epidural or cesarean delivery
- Patients undergoing obstetric procedures without neuraxial anesthesia (as determined by Anesthesia Technique: Neuraxial value codes 0[none], 3[spinal], or 5[unknown])
- Obstetric cases with neuraxial start time documented after Obstetrics Delivery Date/Time

Other exclusions to consider?

- Emergency cases (as determined by Emergency Status value code 1)
  - Should we exclude these?

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NCR-01-OB Logic for determining Neuraxial Replacement

Documentation of multiple neuraxial procedures for the same delivery determined by any of the following criteria being met:

- Two (or more) neuraxial concepts documented more than 20 minutes apart for the same MPOG Case ID (as determined by Obstetric Anesthesia Type value codes 1, 2, 3, or 5)
- Two (or more) neuraxial procedure notes for the same patient under separate MPOG case IDs (as determined by Obstetric Anesthesia Type value codes 6 & 7)

Documentation issues that still need to be addressed in final version of the measure:

- In situ notes are currently false flagging cases - need to refine logic to ensure in situ documentation is not considered as replacement note
- Timing between notes – 20 minutes may be too soon to trigger 'replacement.' Many cases are false flagged due to notes for a single epidural placement documented > 1 hour apart (event notes vs. procedure notes)

NCR-01-OB Attribution Survey Questions

1) Should emergency cases be excluded from the neuraxial catheter replacement measure?
2) Should quality data be available for individual provider feedback, or should this measure be limited to department level feedback?
3) Should attribution be to the provider(s) signed in at the time of first placement or all providers signed into the case between neuraxial procedure start and delivery?
4) Should this measure include both a lower and upper threshold 3-6%, or just an upper level < 6%?

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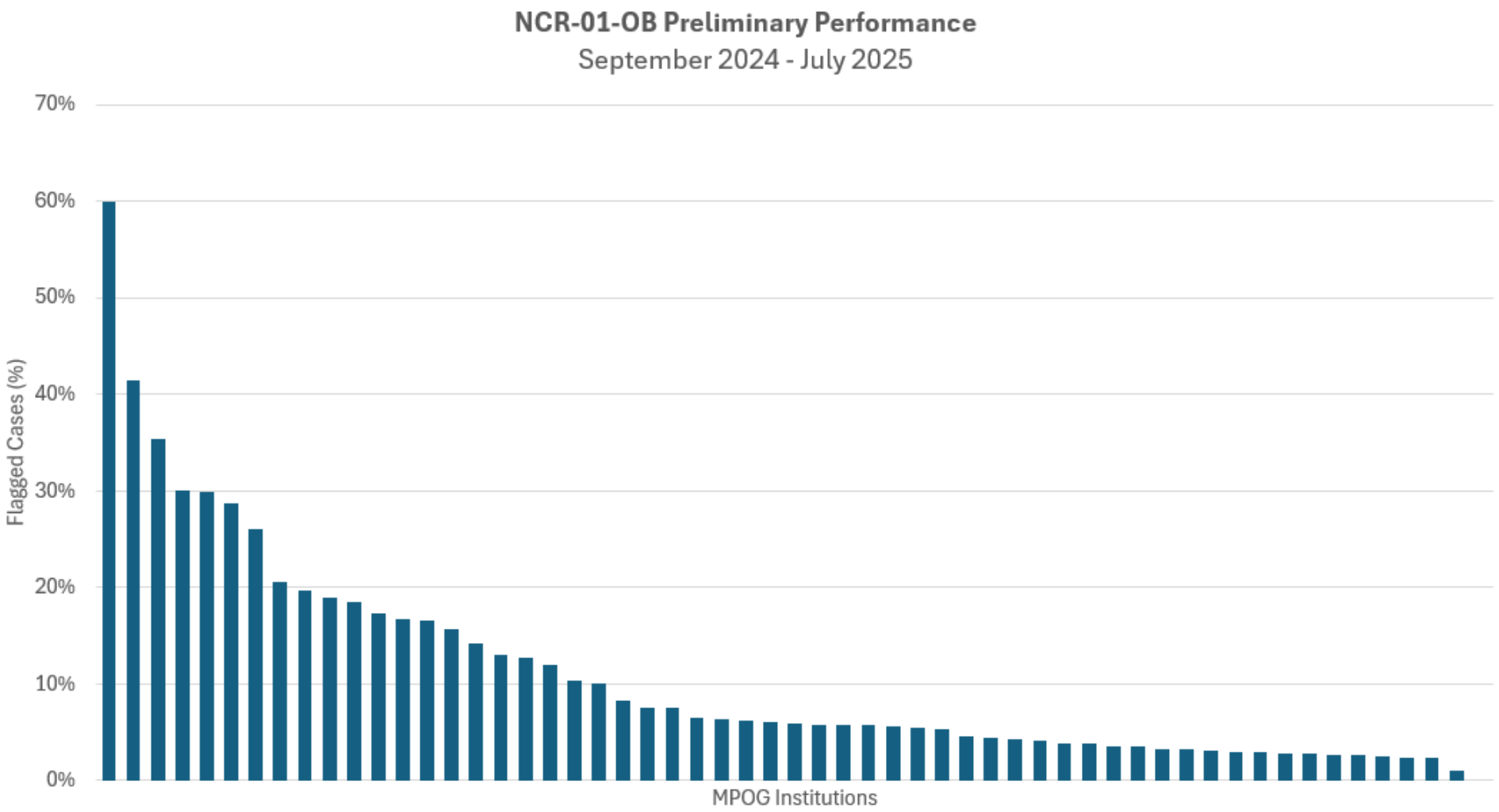
NCR-01-OB Preliminary Performance
September 2024 - July 2025
70%
60%
50%
40%
30%
20%
10%
0%
Flagged Cases (%)
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Request for Collaboration

- If you have a case with confirmed documentation of neuraxial replacement, please contact Kate.
  - We can review case together and see if there are data elements that could be mapped to an MPOG concept to improve identification of these cases.
- If your site documents ‘replacement,’ please send screenshots to Kate of your EHR field (no PHI!). May need a new MPOG concept created for sites that have this field available.

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THANK YOU!

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