WINTER 2025

SOAP NEWSLETTER

Official Newsletter of the Society for Obstetric Anesthesia and Perinatology

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PRESIDENT'S MESSAGE

Heather Nixon, MD
President, Society for Obstetric Anesthesia and Perinatology

Happy New Year!

I want to take a moment to celebrate all the work our members did in 2024 to advance the field of obstetric anesthesiology and broaden the impact of anesthesiology providers everywhere. It is my deepest honor to be involved with such amazing and passionate societal members. I am grateful for the diversity of our membership which helps drive our mission of advancing and advocating for the health of pregnant persons and their babies through research, education and best practices.

SOAP now looks forward to meet the evolving needs of our members, providers and patients everywhere. In 2025, whatever your New Year's Professional Resolution, SOAP can help you meet your goals. We encourage you and invite you to be part of this movement.

(cont'd. - President's Message)

SOAP
Society for Obstetric Anesthesia and Perinatology

PRESIDENT'S MESSAGE - CONTINUED

Want to be more engaged in the SOAP community? Here are just some of the Member Opportunities SOAP continues to offer

Special Interest Groups (SIGs) are created and maintained every year with each group exploring areas of interest within obstetric anesthesia. Our SOAP Special Interest Groups (SIGs) provide an opportunity for members to engage in informal communities focused on specific topics of interest to the obstetric anesthesia care team.

Areas of group focus include Anesthesiologist Assistants, Cardio-Obstetrics, Environmental Sustainability on the Labor and Delivery Unit, Fetal Surgery, Informatics, Maternal Health Inequities, Maternal Mental Health and Birth Trauma, Medical Student and Residents, Obstetric Anesthesia Physician Wellness, OB Critical Care Medicine, Placenta Accreta, Point of Care Ultrasound (POCUS), Private Practice, Recovery after Childbirth and Simulation.

If you have an area of interest and would like to Apply for a New SIG, please visit our website for more information. The next application cycle closes March 5, 2025.

SOAP Committees and Subcommittees are designed to advance the mission and vision of our society. A full list of the committees and subcommittees along with their charges are available on the website for our members to consult here. Please consider talking to the various chairs to get more involved and learn how to apply. If you are attending the annual meeting this year, stay tuned to hear each committee chair provide information about their group's work and how you can get more involved. Committee selection is performed following the annual meeting based on the number of applications received and with an eye for diversity and inclusivity of membership.

Want to find more clinical guidance or educational materials for your providers and patients? Here are some of the resources available and being developed.

Patient Education Website:
Scheduled to debut in 2025, this patient facing website will be the ultimate guide, aiming to share clinical information, answer frequently asked questions, and dispel misinformation and myths surrounding the current practice of obstetric anesthesiology.

(cont'd. - President's Message)

EDITOR'S NOTE

Kristen L. Fardelmann, MD
Editor, Society for Obstetric Anesthesia and Perinatology Newsletter

Happy New Year! While many across the world celebrate this annual milestone with traditions that are meant to bring luck and prosperity, Greek custom observes the "Podariko" which roughly translates to "good foot" – the idea of an individual bringing luck to the family by entering the home on New Years with the right foot forward. As we continue these symbolic traditions, the New Year also represents a time for reflection and a turning point for the future. Growth and progress are purposeful, and Dr. Heather Nixon in her President's Message outlines the many opportunities SOAP has created to support your growth and the progress of the obstetric anesthesiology community throughout 2025.

In this publication of the SOAP Winter Newsletter, Dr. Rebecca Minehart, chair of the Annual Meeting and Live Events (AMLE) Committee, highlights the exciting learning and networking opportunities at the annual meeting and the host city, Portland, Oregon. Drs. Berman and Wong present a brief update on Malignant Hyperthermia – focusing on specific care for the pregnant patient and advances in machine preparation and dantrolene packaging. I present a feature on fellowship training, board certification and lessons learned from pediatric anesthesiology and Dr. Batakji discusses Obstetric Life Support (OBLS) for multidisciplinary team training in anesthesiology residency and fellowship programs.

Following a successful year for ASA's Committee on Obstetric Anesthesia, chair Dr. Mark Zakowski reports on the approval of five additional statements

(cont'd. - Editor's Note)

President's Message - continued

Provider Education:

New in 2025, our Education Committee will launch formal use of the C8 Platform to provide our members with organized, searchable and up to date educational information in an on-the-go format to meet current provider needs. Members, look for your email invitation to use the platform soon!

In 2025, we will continue our in-person and virtual educational activities.

The 2025 SOAP Annual Meeting in Portland, Oregon is centered on the theme, "Leveraging Technology for Better Outcomes: Improving the Lives of Patients and Clinicians." The Annual Meeting and Live Events (AMLE) Committee has compiled an incredible schedule of thought-provoking educational content. This in-person meeting held April 30-May 4, 2025 at the Hilton Portland Downtown Hotel is the pinnacle of our year and provides an opportunity to network, share knowledge and discuss the future.

For those unable to attend in-person, The Annual Meeting Virtual Highlights Event will air following the meeting and includes a curated offering of high-quality recorded meeting content.
In 2025, we will also continue to accept submissions for presentations at the annual conference and to solicit new members to help evaluate abstract submissions. Consider applying for these opportunities.

The Annual Fall Forum: This is a professional development series geared at anyone who wants to evolve their expertise in Education, Leadership, Quality Improvement or Research. Tune in to hear experts in the field talk about key components of their journey to success and how to improve your skills in this area.

The Conferences in Obstetrical Point of Care Ultrasound (COPUS) Case Series is intended to improve image interpretation and help providers learn to apply POCUS-findings to drive care in specific clinical situations.

Want to engage in a community of researchers, learn from research experts or present your research findings?

The Research Journal Club is a quarterly, interactive virtual event designed to highlight relevant research articles. Paper authors present the background and details of the research, and this is followed by an interactive discussion.

The SOAP Research Network Symposium, hosted at the SOAP Annual Meeting and at the ASA Annual Meeting, provides a forum for members to discuss interesting research ideas, crowd source research design expertise and gain collaborators. Please submit your proposals for presentation at this year's Annual Meeting symposium. The Network is open to all members.

(cont'd. - President's Message)

Editor's Note - continued

and the future initiatives of the committee. Also featured in Map your Practice! *A SOAP Newsletter Subcommittee Initiative* is the new consensus statement collaboration from SOAP, SMFM, and ASRA on pain management for pregnant patients with opioid-use disorder.

It's an exciting time for the obstetric anesthesiology community as we plan to convene at the SOAP Annual Meeting! I look forward to connecting with everyone in Portland!

Sincerely,
Kristen L. Fardelmann, MD

Research Surveys - Do you have a research survey that you would like to distribute to the SOAP membership? All submitted surveys will be evaluated for Scientific Merit and if approved, will be administered for a fee. Please visit the website for more information.

Present Your Research at the Annual Meeting – the submission site is open now and abstract submissions are due January 31, 2025!

Apply for A Grant – SOAP is proud to help sponsor two grants, the SOAP-FAER Mentored Research Training Grant and the Diversity and Inclusivity Mentored Grant. These two grants foster young investigators in our field through mentorship and training. Please see the website for full details and deadlines.

Want to Professionally Develop as a Leader, a Researcher, an Educator or a Quality Improvement Expert?

Mentor-Mentee Matching Program, the SOAP Mentoring Academy has continued pairings in matching individuals based on skills including education, grant funding, leadership, quality improvement, and more. Please visit the website Mentoring Academy section to learn how to apply to be a Mentor or a Mentee!

Mentoring Academy Speaker Exchange Program - For those of you looking to improve your speaking prowess, consider joining the SOAP Speaker Exchange Program that allows individuals opportunities to virtually present lectures to other institutions and receive valuable insights and feedback to help develop their skills.

Want to Celebrate a Deserving Colleague?

All SOAP members are eligible to nominate deserving individuals for yearly awards and speaking roles including the Teacher of the Year >10yrs and <10yrs, the Distinguished Service Award, the Diversity and Inclusivity Award, the Ostheimer Lecture, the **BRAND-NEW Mentoring Award**.

WANT TO INCREASE YOUR PHILANTHROPIC FOOTPRINT THIS YEAR?

Endowment Fund Campaign

SOAP continues its Endowment Fund Campaign with a goal to continue sustainable funding for the organization.

Campaign funds will be invested, and the in-perpetuity proceeds used in three focus areas: 1) individual-led research, 2) society-led research including the Research Network and 3) patient-facing education.

Join us at the Annual Meeting New Fundraising Event, a night of community, friends, and fun as we celebrate SOAP through philanthropy. Participate in our on-line auction for the event. If you cannot make it to the meeting, start 2025 with a tax deductible donation on our website.

Do you have questions?

If you have questions about any of our endeavors or want to know how you can use your membership to its highest level, please feel free to reach out to me personally or to any Board of Director, we are excited to engage with members like you and help meet your needs.

(cont'd. - President's Message)

I look forward to working with you in 2025 as we pursue excellence and equity in the care of pregnant patients and their newborns everywhere.

Gratefully,
Heather Nixon, MD
University of Illinois at Chicago

2025 SOAP ANNUAL MEETING IN PORTLAND: SHAPING HEALTHCARE'S FUTURE

Rebecca Minehart, MD, MSHPEd
Chair, Annual Meeting and Live Events Committee

Rebecca Minehart, MD, MSHPEd

Greetings from the Annual Meeting and Live Events Committee! We are thrilled to invite you to the 2025 Annual Meeting, which will take place from **April 30 to May 4, 2025**, in the heart of Portland, Oregon, at the Hilton Portland Downtown Hotel. This year's theme, **"Leveraging Technology for Better Outcomes: Improving Lives of Patients and Clinicians,"** promises an engaging and forward-thinking experience of what the future of obstetric anesthesia holds.

Prepare for an outstanding program featuring highly educational workshops, including sessions on the latest advancements in artificial intelligence, precision medicine, and digital health tools designed to enhance both patient and clinician outcomes. We are especially excited to announce a **Keynote Presentation by Ashley Duque Kienzle**, a renowned expert in AI and health technology, whose insights will undoubtedly inspire and challenge us. You will see usual favorites like the **Ostheimer Lecture** delivered by **Dr. Emily Sharpe**, offering groundbreaking perspectives on patient-centric healthcare innovations, and the **Fred Hehre Lecture** presented by **Dr. Medge Owen**, a global leader in advancing maternal and neonatal health through her work in *Kybele*. Additionally, the event will include perennial favorites such as the **Research Symposium, Gertie Marx Research Competition, Best Paper Competition,** and **Sol Shnider Clinical Talks**, ensuring a diverse array of topics to captivate every attendee.

When you're not immersed in the enriching conference sessions, Portland awaits! Renowned for its vibrant food scene, lush green spaces, and eclectic culture, the city offers something for everyone. Stroll through the iconic Powell's City of Books, explore the serene Japanese Garden, or enjoy the lively atmosphere of the Pearl District. For the adventurous, the nearby Columbia River Gorge and Mount Hood provide world-class hiking and stunning natural vistas.

The 2025 Annual Meeting is more than just an opportunity to learn and share knowledge; it's a chance to connect with peers and leaders from across the globe. Together, we'll explore how technology is transforming healthcare and fostering better outcomes for patients and clinicians alike. On behalf of the Annual Meeting and Live Events Committee, we look forward to seeing you in Portland!

Rebecca D. Minehart, MD, MSHPEd
Chair, Annual Meeting and Live Events Committee

MEMBER CONTENT

Malignant Hyperthermia: Updates for Obstetric Anesthesia Care

David Berman, MD, MEd
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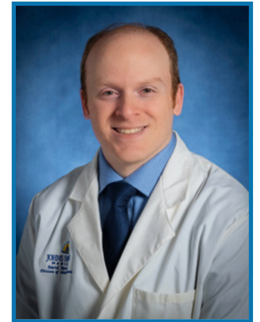
David Berman, MD, MEd

You are covering the labor and delivery floor when the obstetrician calls you and says "a patient who just presented to us is ruptured, breech, contracting and needs a Cesarean delivery. She says her dad had a history of malignant 'somethingsomething,' and that the anesthesiologist would understand. When can we roll?" How do you respond?

As the two obstetric anesthesiologists who cover the Malignant Hyperthermia (MH) Hotline, we offer this update to the obstetric anesthesia community — what's new with MH, as well as a brief summary of some common scenarios the anesthesiologist might encounter on the labor floor. While MH is never something you want to handle on L&D, preparedness is key.

Cynthia Wong, MD

MH Background

MH is a hypermetabolic reaction of skeletal muscle triggered by exposure to volatile anesthetic agents and succinylcholine. A pharmacogenetic disease, most cases are inherited in an autosomal dominant fashion. Left untreated, or treated inappropriately, MH is associated with a high mortality rate.[1] The best treatment for MH is avoidance of MH. If a crisis occurs, treatment includes dantrolene, aggressive correction of electrolyte abnormalities, active cooling, and prolonged monitoring.[2] Patients who experience a MH crisis should be treated as MH-susceptible throughout their lives, and family members should be treated as susceptible until testing can be arranged. The spectrum of MH-related disorders may also include exertional heat illness, statin-induced myopathy, and severe recurrent exertional rhabdomyolysis.[3]

Testing

Testing for MH has historically been accomplished by applying the caffeine-halothane contracture testing (CHCT) to a skeletal muscle biopsy. However, there are now significant constraints in terms of availability.[4] Currently, only two centers in the United States perform the CHCT for civilians with a third site reserved for military personnel. Given the invasiveness, cost, and logistical challenges inherent in biopsy testing, the last several decades have seen great advances in genetic testing for MH susceptibility. Genetic testing is noninvasive and significantly less costly than a muscle biopsy/CHCT. One of three possible results is reported: MH-associated variant identified (treat as MH susceptible), variant of unknown significance identified (CHCT recommended to rule-out MH susceptibility), or no mutation found (CHCT recommended to rule-out MH susceptibility). Therefore, while negative testing cannot rule out MH susceptibility, a positive test for a MH-causative mutation can save a patient (and family members) the challenges of CHCTing.

The Hotline

The MH Hotline has existed since 1982. Supported by the Malignant Hyperthermia Association of the United States (MHAUS), it is currently staffed by 28 volunteer consultants who are on call 24/7 for two-weeks, usually several times a year.[5]

(cont'd - Malignant Hyperthermia: Updates for Obstetric Anesthesia Care)

Reachable via phone, the MH Hotline handles approximately 700 calls per year. These are a mix of active MH crisis events, questions about follow-up and about upcoming cases. All calls are recorded, logged, and many are entered into a registry for further research. Significant scholarly work has been published from this North American Malignant Hyperthermia Registry, expanding our awareness of the disease and its treatment.[2,6-8]

MH and the Care of the Pregnant Patient

On the labor floor, the questions typically center around the care of the MH-susceptible patient. Questions also arise regarding the potential MH-susceptibility of the fetus if the father of the fetus is MH-susceptible. While high-quality evidence is not available, MHAUS consensus statements are helpful in guiding care.[9,10]

In the parturient who is MH-susceptible, avoidance of triggering agents is key. For laboring patients, early initiation of neuraxial labor analgesia, with regular confirmation of adequate analgesia, is key to avoiding general anesthesia should an intrapartum cesarean delivery be necessary. If general anesthesia is required, induction and maintenance with propofol is recommended; rocuronium should be used to facilitate endotracheal intubation. If the father of the fetus is MH-susceptible, administration of triggering agents to the mother should be avoided until after delivery of the fetus.

The anesthesiologist may wish to take the opportunity to discuss the implications of MH susceptibility with the patient and her family. They may have questions about susceptibility of their newborn child. Information about testing can be provided – MHAUS.org includes a patient-facing website with additional resources.

Anesthesia Machine Preparation

Historically, anesthesia machine preparation took a significant amount of time – up to two hours of high fresh gas flows after changing out the carbon dioxide absorbent and breathing circuit. Fortunately, activated charcoal filters are now commercially available and this greatly simplifies this process. Requiring a rapid 60 to 90 second flush, these filters lower trace volatile concentrations to below threshold levels for up to 12 hours of continuous use.[11,12] While caring for a parturient during labor, the anesthesiologist may wish to “prepare” an anesthesia machine in case of emergency intrapartum cesarean.

Dantrolene? Ryanodex? What’s New?

The older dantrolene formulations were packaged 20 mg per vial, requiring 60-mL sterile water for time-consuming reconstitution. This takes precious time and resources away from other important clinical tasks, such as aggressive hyperventilation, placing additional vascular and arterial access, managing hemodynamics, and switching to a nontriggering anesthetic technique.

The new form of dantrolene – Ryanodex – is packaged 250 mg per vial and requires dilution with 5-mL sterile water. It is the same medication, merely packaged in a concentrated lypophilized formulation for ease of dissolution. An initial 2.5-mg/kg dose is recommended, and the ease of dissolution and concentration result in far more rapid administration compared to previous packaging. The anesthesiologist and the L&D nursing team should be aware of how to rapidly access dantrolene (and which formulation is available) and the MH kit. MHAUS recommends that dantrolene be available within

(cont’d - Malignant Hyperthermia: Updates for Obstetric Anesthesia Care)

10 minutes of any anesthetizing location: this may necessitate storage of a dantrolene “starter pack” on the labor suite.

Questions?

The MH Hotline (800-MH-HYPER) is available 24/7 for consultations, and the authors remain available for nonemergent consultation or to help answer questions about malignant hyperthermia, and MHAUS. We encourage you to learn more about malignant hyperthermia, be prepared with routine drills on your labor floors, and consider a donation to MHAUS to cover the considerable cost of operating the Hotline and developing consensus guidelines.

References

1. Rosenberg H, Pollock N, Schiemann A, Bulger T, Stowell K. Malignant hyperthermia: a review. *Orphanet J Rare Dis.* 2015;10:93.
2. Larach MG, Gronert GA, Allen GC, Brandom BW, Lehman EB. Clinical presentation, treatment, and complications of malignant hyperthermia in North America from 1987 to 2006. *Anesth Analg.* 2010;110(2):498-507.
3. Laitano O, Murray KO, Leon LR. Overlapping mechanisms of exertional heat stroke and malignant hyperthermia: Evidence vs. Conjecture. *Sports Med.* 2020;50(9):1581-1592.
4. Allen GC, Larach MG, Kunselman AR. The sensitivity and specificity of the caffeine-halothane contracture test: a report from the North American Malignant Hyperthermia Registry. The North American Malignant Hyperthermia Registry of MHAUS. *Anesthesiology.* 1998;88(3):579-588.
5. Pinyavat T, Rosenberg H, Wong CA, Belani KG. The story behind the MH hotline. *ASA Monitor.* 2024;88(7):1-8.
6. Litman RS, Flood CD, Kaplan RF, Kim YL, Tobin JR. Postoperative malignant hyperthermia: an analysis of cases from the North American Malignant Hyperthermia Registry. *Anesthesiology.* 2008;109(5):825-829.
7. Nelson P, Litman RS. Malignant hyperthermia in children: an analysis of the North American malignant hyperthermia registry. *Anesth Analg.* 2014;118(2):369-374.
8. Larach MG, Brandom BW, Allen GC, Gronert GA, Lehman EB. Malignant hyperthermia deaths related to inadequate temperature monitoring, 2007-2012: a report from the North American malignant hyperthermia registry of the malignant hyperthermia association of the United States. *Anesth Analg.* 2014;119(6):1359-1366.
9. FAQs - MHAUS. Accessed December 19, 2024. https://www.mhaus.org/faqs/category/frequently-asked-questions-about/mh-and-pregnancy/
10. Parturient with MHS Partner. Accessed May 18, 2023. https://www.mhaus.org/healthcare-professionals/mhaus-recommendations/parturient-with-mhs-partner/
11. Kim TW, Nemergut ME. Preparation of modern anesthesia workstations for malignant hyperthermia-susceptible patients: a review of past and present practice. Anesthesiology. 2011;114(1):205-212.
12. Preparation of Anesthesia Workstations to Anesthetize MH Susceptible Patients. Accessed December 18, 2024. https://www.mhaus.org/healthcare-professionals/mhaus-recommendations/preparation-of-anesthesia-workstations-to-anesthetize-mh-susceptible-patients/

MEMBER CONTENT

Examining Obstetric Anesthesiology Fellowship and Board Certification: Lessons Learned from Pediatric Anesthesiology Fellowship Board Certification

Kristen L. Fardelmann, MD

Kristen L. Fardelmann, MD

In 2012, obstetric anesthesiology fellowships transitioned to Accreditation Council for Graduate Medical Education (ACGME) accreditation. Concurrently, the American Board of Anesthesiology (ABA) was preparing for the first examination for subspecialty certification in pediatric anesthesiology – 200 multiple-choice questions administered over four-hours via Pearson VUE testing centers on October 19, 2013.[1] Eligible applicants were required to have:[1]

1. A medical degree or equivalent
2. Hold an unexpired license to practice medicine or osteopathy in the US or Canada that was active and unrestricted
3. Be an ABA diplomate
4. Be an active participant in Maintenance of Certification in Anesthesiology Program through the ABA
5. Completed a one-year ACGME accredited fellowship in pediatric anesthesiology or equivalent
    a. Equivalent criteria (Anesthesiology Residency Graduate prior to July 1, 2012) must include high risk cases with neonates and children less than 2 years old
        i. Clinical practice dedicated to pediatric anesthesiology for at least 2 years or
        ii. Clinical practice with 30% dedicated pediatric anesthesiology coverage over the previous 5 years

Non-fellowship trained applicants meeting equivalent criteria who chose not to register prior to January 1, 2019 are no longer eligible for board certification and would require ACGME accredited fellowship training for eligibility. A decade later, subspecialty board certification is under consideration for obstetric anesthesiology. Much can be learned from the experience of Pediatric Anesthesiology and the journey of board certification.

Distinction

Distinguishing individuals with advanced knowledge and clinical acumen in the ‘evaluation, preparation and management of pediatric patients undergoing diagnostic and therapeutic procedures in operative and critical care settings’ in addition to treatment of patients with acute and chronic pain is relevant for our youngest, most complex and vulnerable pediatric patients.[2] Since board-certification, our pediatric subspecialty colleagues provide care in a variety of environments with a clinical case mix that varies significantly. A survey of board-certified pediatric anesthesiologists from 2019 reported that about 50% of respondents work in academic practice with about 50% of clinical duties delegated to children 5 years or younger, 24% worked in private practice with academic affiliation with 45% of clinical duties delegated to children 5 years or younger, and 22% worked in private practice with 33% clinical duties delegated to our youngest patients.[3] In the same survey, greater than 90% of respondents provided care for a pediatric fellowship

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level case within the past year,[3] utilizing the expertise gained during subspecialty training. Given the significant variety and complexity in pediatric populations, is fellowship training and board certification necessary for all who practice pediatrics, especially for the healthy, low risk patient? Does board certification in anesthesiology alone provide sufficient training for this population?[4] In the absence of board certification, readiness for clinical practice is determined by individual subspecialty anesthesiologists (clinical competency committees and program directors), credentialing committees and healthcare institutions. Institutions caring for the high-risk pediatric population may require board-certification for clinical practice, limiting employment opportunities for the non-board certified/eligible anesthesiologist practicing pediatrics.[4]

Maternal Levels of Care

In 2015 and again in 2019, the American College of Obstetricians and Gynecologists (ACOG) in collaboration with the Society for Maternal-Fetal Medicine (SMFM) described Maternal Levels of Care to decrease maternal morbidity and mortality through improvements in systems of care for our highest risk patients. This standardized consensus outlined appropriate training for health care providers at each maternal level. In the highest risk institutions – Level IV Regional Perinatal Health Care Centers, in comparison to the obstetric provider who is expected to be a “board-certified maternal-fetal medicine expert” with full inpatient privileges, the anesthesia coverage is required to be a “board-certified anesthesiologist with obstetric anesthesia fellowship training or experience in obstetric anesthesia.” [5] Equivalence of the distinction is lacking, although expertise is not, and board-certification would bridge this gap in credentialing merit.

Workforce

Would board certification change the available workforce or the concentration of specialists in our high-risk obstetric units? Although access for labor analgesia services and coverage of labor units by anesthesia professionals has drastically improved over recent decades in delivery units of all sizes, [6] progress remains necessary. With demand far exceeding supply,[7] the obstetric anesthesiology fellowships nurture the future leaders of our field. Over the past 20 years, pediatric fellowship positions have increased significantly, especially since board certification in 2012.[8,9] In 2024, 229 positions were offered in the match with about 70% of the positions filled.[10] Despite the increased ratio of ACGME-accredited anesthesiology fellows to graduating residents of 0.36 in 2008 to 0.59 in 2022, the ratio of pediatric anesthesiology fellows remained stagnant from 0.10 to 0.11 over the same period.[8] This stagnancy may have significant implications for care of the pediatric population in the coming years and board certification of the subspecialty has not positively impacted the volume of the workforce. Other important factors must be at play such as job market, burnout, retirement, part-time employment and perception of overabundance of pediatric anesthesiologists.[8,9,11] Some may argue with the abundance of fellowship positions and the institutional preference to fill offered positions, the competitiveness of applicants may suffer,[9] providing an interest for a standardized evaluation of readiness for clinical practice such as board certification.

Interestingly, in 2023, all ACGME accredited anesthesiology fellowships including adult cardiothoracic, pain medicine, and obstetric anesthesiology offered more positions than applicants entering the match.[8]

(cont’d - Examining Obstetric Anesthesiology Fellowship and Board Certification: Lessons Learned from Pediatric Anesthesiology Fellowship Board Certification)

This is in stark contrast to the specialty of anesthesiology that found itself as one of the most competitive specialties in the country.[12] Since 2020, between 62 and 69.5% of ACGME obstetric anesthesiology fellowship positions were filled in the match.[13] Would board certification change the number of applicants or obstetric anesthesia workforce of the future?

Trainee Cost

For the class of 2023, the Association of American Medical Colleges reports that the median education debt is $200,000 and rising.[14] Given the substantial income differences between PGY5 and PGY6 years compared to the first two years of an attending salary, this difference becomes an important factor in trainee decision making.[4] Proponents for additional subspecialty training in pediatric anesthesiology emphasize research acumen, leadership skill development, and networking as important advantages, although learning is a life-long journey, and these skills may be emphasized in the early years of faculty practice instead of fellowship training.[4] Additional costs related to certification and maintenance of certification should not be ignored. However, given the decrease in expected board-certified pediatric anesthesiologists, new graduates may have significant bargaining power for salary and working conditions,[11] especially in hospitals expecting pediatric populations to be cared for by board certified subspecialists.

ACGME versus Non-ACGME Obstetric Anesthesiology Fellowships

Since ACGME accreditation, non-ACGME obstetric anesthesiology fellowship positions have persisted. Appeal includes the ability to split time between fellowship training and faculty responsibilities, increasing salary for the PGY5 year. However, transitioning to board certification for obstetric anesthesiology, if based on ABA criteria for pediatric anesthesiology, would not allow for non-ACGME graduates to be board eligible for several years and may ultimately drive the elimination of non-ACGME fellowship positions, especially if high risk obstetric institutions required board certification for credentialing.

Quality of Care

Although data on the impact of pediatric anesthesiology board certification on anesthesia-related outcomes, including morbidity and mortality, is lacking, it does appear that the volume of cases performed by pediatric anesthesiologists plays a role in outcomes with more cases equating to safer anesthesia care.[9] This argues for continued subspecialty training and subspecialists applying their focused expertise within their clinical practice. Evidence for the positive influence of obstetric anesthesiologists on maternal morbidity and mortality is significant and growing, arguing for the relevance of advanced training in our subspecialty.[15-18] Would board certification further improve the quality of care that we provide to our patients?

Value of obstetric anesthesiology training to patients and healthcare systems is apparent, however, it is also beneficial for practicing subspecialists as well. In a survey of fellowship trained obstetric anesthesiologists that evaluated their perceived relevance of subspecialty training, 77% reported fellowship training as “extremely beneficial,” 84% reported that it enhanced their quality of life, 99% reported that it improved the quality of patient care, and 86% believed it helped secure their first

(cont’d - Examining Obstetric Anesthesiology Fellowship and Board Certification: Lessons Learned from Pediatric Anesthesiology Fellowship Board Certification)

post-training employment in addition to positively influencing career trajectory.[19] In 2021, a small sample of anesthesiology residents in the United States identified the following as barriers to pursuit of obstetric anesthesiology fellowship: training is unnecessary, financial concerns, interest in other fellowships, inadequate curriculum, a disinterest in obstetrics, benefits limited to academic settings, and lack of knowledge related to ACGME accreditation.[20] Would board certification change these perceptions for faculty and residents?

The value of subspecialty training in obstetric or pediatric anesthesiology is apparent, however, evidence for a positive impact of board certification in pediatric anesthesiology is lacking. Further research is needed to understand if board certification is the best approach for the future of our subspecialty.

References

1. ASA Newsletter January 2013;77:46-47.
2. https://www.theaba.org/subspecialty-exam-type/pediatric-anesthesiology-exam/. Accessed January 18, 2025.
3. Muffly M, Scheinker D, Muffly T, et al. Practice Characteristics of Board-certified Pediatric Anesthesiologists in the US: A Nationwide Survey. Cureus 2019;11(9):e5745
4. Boyer TJ, Ye J, Ford MA, et al. Modernizing Education of the Pediatric Anesthesiologists. Anesthesiology Clin 2020;38:545-58.
5. The American College of Obstetricians and Gynecologists. Levels of Maternal Care: Obstetric Care Consensus No. 9. Obstet Gynecol 2019;134(2):e41-55.
6. Traynor AJ, Aragon M, Debashis G et al. Obstetric Anesthesia Workforce Survey: A 30-Year Update. Anesth Analg 2016;122:1939-46.
7. Gelber K, Kahwajian H, Geller AW, et al. Obstetric Anesthesiology in the United States: Current and Future Demand for Fellowship-Trained Subspecialties. Anesth Analg 2018;127(6):1445-47.
8. Giustini AJ, Sivak EL, Nasr VG, et al. Where have all the pediatric anesthesiology fellows gone in the USA? Anesthesiology fellowship trends. Pediatr Anesth 2024;34:734-741.
9. Cladis FP, Lockman J, Lupa MC, et al. Pediatric Anesthesiology Fellowship Positions: Is There a Mismatch? Anesth Analg 2019;129(6):1784-86.
10. https://www.sfmatch.org/specialty/pediatric-anesthesiology-fellowship/Statistics. Accessed January 18, 2025.
11. Lim D, Corridore M, Lupa C. Seminars in Pediatric Surgery 2024;33:151452
12. Rock-Klotz JA, Miller TR. 2023 Residency Match: Anesthesiology Is One of the Most Competitive Specialties. ASA Monitor 2023;87(8):1-5
13. https://sfmatch.org/specialty/obstetric-anesthesiology-fellowship/Statistics. Accessed January 18, 2025.
14. https://students-residents.aamc.org/media/12846/download. Accessed January 18, 2025.
15. Lim G, Facco FL, Nathan N, et al. A Review of the Impact of Obstetric Anesthesia on Maternal and Neonatal Outcomes. Anesthesiology 2018;129(1):192-215.
16. Bauer ME, Kountanis JA, Tsen LC, et al. Risk factors for failed conversion of labor epidural analgesia to cesarean delivery anesthesia: a systematic review and meta-analysis of observational trials. Int J Obstet Anesth 2012:21(4):294-309.
17. Wagner JL, White RS, Mauer EA, et al. Impact of anesthesiologist’s fellowship status on the risk of general anesthesia for unplanned cesarean delivery. Acta Anaesthesiol Scand. 2019;63:769–774.
18. Cobb BT, Lane-Fall MB, Month RC, et al. Anesthesiologist Specialization and Use of General Anesthesia for Cesarean Delivery. Anesthesiology 2019;130(2):p 237-246.
19. Thomas C, Neumann KE, Smith C, et al. A survey of United States obstetric anesthesiologists’ perceived value of obstetric anesthesiology fellowship. Int J Obstet Anesth 2023;56:103930.
20. Ende HB, Lozada MJ, Micevych PS, et al. A survey of USA anesthesiology residents regarding their perceptions of, and barriers to, fellowship training in obstetric anesthesia. Int J Obstet Anesh 2021;46:103159.

MEMBER CONTENT

It is a Code, and the Patient is Pregnant!

Mariam Batakji, MD

Mariam Batakji, MD

Starting a new job is always challenging, let alone working in a labor and delivery unit at a community hospital, especially one that serves as a referral center for high-risk obstetric patients adds a unique layer of complexity. In my community hospital, obstetricians and family medicine physicians admit patients to labor and delivery and perform cesarean deliveries. The training I received during my ACGME accredited obstetric anesthesiology fellowship developed my expertise in crisis management during high-acuity emergencies in a thoroughly resourced setting. As a new attending, I learned the hospital policies and protocols for obstetric emergencies to be prepared when I am covering the unit. This review provided an opportunity for multidisciplinary discussion and collaboration, particularly for maternal cardiac arrest (MCA). Through the American Academy of Family Physicians, my family medicine and nursing colleagues completed the Advanced Life Support in Obstetrics (ALSO) training, an evidence-based, multidisciplinary program that prepares obstetric teams with standardized pathways to manage obstetric emergencies.[1]

Scope of Maternal Cardiac Arrest

A recent study by Ford et al., revealed that the incidence of MCA during delivery hospitalization is higher than previously estimated, occurring in approximately 1 in 9,000 deliveries in the US, and two thirds of these cases survived to hospital discharge.[2] Disparities were noted, with a higher incidence of MCA among non-Hispanic Black patients, those on Medicare or Medicaid, and individuals with underlying medical comorbidities.[2] The study emphasized that implementing clinical guidelines, providing proper risk oriented care and addressing potential knowledge deficits in MCA and cardiopulmonary resuscitation techniques may improve maternal outcomes.[2]

Current Guidelines

The American Heart Association (AHA) In-Hospital Advanced Cardiac Life Support (ACLS) Algorithm for MCA provides critical guidance, incorporating obstetric-specific modifications. Key recommendations include:[3]

- Establishing a multidisciplinary MCA team with obstetricians, anesthesiologists, intensivists, neonatologists, and in-hospital cardiac arrest response services
- Identifying and addressing causes of arrest, including anesthesia-related complications (e.g., high spinal, local anesthetic toxicity) and obstetric causes (e.g., hemorrhage, amniotic fluid embolism) in addition to non-obstetric (H's and T's) etiologies
- Providing high-quality CPR
- Adapting resuscitation efforts to account for physiological changes during pregnancy
    - Relief of aortocaval compression with manual left uterine displacement
- Preparing for perimortem cesarean delivery at 5 minutes in the absence of return of spontaneous circulation

(cont'd - It is a Code, and the Patient is Pregnant!)

The Role of Obstetric Life Support (OBLS) Training

Anesthesiologists play a pivotal role in managing theses emergencies and leading the multidisciplinary response, including in our lowest resourced hospitals. Familiarity with the various etiologies of MCA and obstetric modifications to the ACLS algorithms is essential for effective intervention. However, this raises the question: Are all anesthesiologists and obstetric teams adequately prepared in managing MCA?

A recent article by Shields et al., introduced the Obstetric Life Support (OBLS) curriculum and demonstrated that it significantly improved the knowledge and confidence of various health care specialties in managing MCA.[4] The OBLS is a comprehensive, interdisciplinary, simulation-based training curriculum on MCA prevention and treatment grounded in evidence-based guidelines from the AHA.[5] In simpler words, it is a training program designed to prepare various health care professionals to manage MCA effectively.

In a randomized clinical trial, 46 health care professionals from various specialties, including anesthesiology and emergency medicine, were divided into two groups. The intervention group received OBLS training while the control group did not. Outcomes were assessed through cognitive scores, mega code performance evaluations, and confidence assessments at baseline, 6 months, and 12 months post-training.[4] Results showed significant improvements in knowledge, skills, and confidence among the OBLS-trained group, despite most participants holding prior BLS and ACLS certifications.[4]

A Path Forward: Integrating OBLS into Anesthesiology Training

Given the demonstrated benefits of OBLS, its integration into anesthesiology residency and obstetric anesthesia fellowship curricula warrants serious consideration. OBLS certification could ensure that anesthesiologists and multidisciplinary teams covering labor and delivery units are fully equipped to manage MCA effectively. This exposure provides an opportunity for anesthesiology trainees to disseminate their skills and knowledge throughout the United States as they transition from trainee to attending positions, leading the multidisciplinary obstetric response to MCA in hospitals of all volumes and acuity. This training could bridge existing knowledge gaps, improve interdisciplinary collaboration, and ultimately enhance patient outcomes.

References:

1. Advanced Life Support in Obstetrics Program. https://www.aafp.org/cme/programs/also.html. Accessed last January 20, 2025.
2. Ford ND, DeSisto CL, Galang RR et al. Cardiac Arrest During Delivery Hospitalization: A Cohort Study. Ann Intern Med. 2023;176(4):472-479.
3. Cardiac Arrest in Pregnancy In-Hospital ACLS Algorithm. https://cpr.heart.org/-/media/CPR-Files/CPR-Guidelines-Files/Algorithms/AlgorithmACLS_CA_in_Pregnancy_InHospital_200612.pdf. Accessed last January 20, 2025.
4. Shields AD, Vidosh J, Minard C et al. Obstetric Life Support Education for Maternal Cardiac Arrest a Randomized Clinical Trial. JAMA Network Open 2024;7(11): e2445295.
5. Shields AD, Vidosh J, Thomson BA et al. Validation of a simulation-based resuscitation curriculum for maternal cardiac arrest. Obstet Gynecol 2023;142(5),1189-1198.

MAP YOUR PRACTICE!

A SOAP Newsletter Subcommittee Initative

Opioid-use disorder (OUD) is associated with increased maternal morbidity and mortality. A recently published consensus statement from SOAP, SMFM, and ASRA outlines recommendations for pain management for pregnant patients with OUD. The impact of prenatal anesthesia consultation on delivery outcomes has not been evaluated. Does your institution perform prenatal consultation for pregnant patients with OUD? If so, what are your main goals for preparation and planning during consultation? Use the link below and share your strategy in Tradewing!

Map Your Practice!

1. Lim G, Carvalho B, George RB, et al. Consensus Statement on Pain Management for Pregnant Patients with Opioid-Use Disorder from the Society for Obstetric Anesthesia and Perinatology, Society for Maternal-Fetal Medicine, and American Society of Regional Anesthesia and Pain Medicine. Anesth Analg 2024. Nov 6. doi: 10.1213/ANE.0000000000007237

COMMITTEE UPDATES

ASA Committee on Obstetric Anesthesia Update

Mark Zakowski, MD, FASA

Chair

Mark Zakowski, MD

In October 2024, the American Society of Anesthesiologists (ASA) House of Delegates approved all five statements from the Committee on Obstetric Anesthesia (CObA): *Statement on Resuming Breastfeeding after Anesthesia* as a routine Five-Year Review with expanded table of medications, led by Rachel Kacmar, *Statement on Providing Psychological Support in Obstetric Anesthesia* led by David Stahl, *Statement on the Use of Adjuvant Medications and Management of Intraoperative Pain During Cesarean Delivery* – led by Michael Hofkamp, *Statement on Anesthesia Support of Postpartum Sterilization* – led by Regina Fragneto, *and Statement on Support of In Vitro Fertilization* led by Regina Fragneto.

The 2024 ASA *Statement on Adjuvant Medications and Management of Intraoperative Pain During Cesarean Delivery* had its impact for members, non-members and the public amplified by a Letter to the Editor of *IJOA*. Similarly, a Letter to the Editor of *Anesthesiology* was submitted regarding psychological support in obstetrics. The importance of obstetric anesthesia professionals providing psychological support and understanding has been highlighted by a recent review article on childbirth related PTSD and accompanying editorial.

The 2025 ASA CObA workplan includes developing statements regarding Obstetric Difficult Airway, in collaboration with SOAP, ACOG and Society for Airway Management, Staffing for Obstetric Anesthesia Services, Anesthesia Support for External Cephalic Version and Role of Antenatal Provision of Anesthesia Consultation.

(cont'd. - ASA Committee on Obstetric Anesthesia Update)

ASA Committee on Obstetric Anesthesia Update - Continued

These activities meet CObA's mission and ASA's 2025 strategic plan including: Advocate for the highest standard in patient safety and quality of care, expand member awareness of the work being done on their behalf, provide the best opportunities for anesthesiologists to acquire and maintain knowledge and skills associated with the practice of anesthesiology, strengthen the visibility and voice of the specialty as leader in the health care ecosystem, advance ASA's position as medicine's leading resource for anesthesia patient safety and quality and advance collaboration with subspecialty and other anesthesiology-related societies.

I wish to thank the many ASA CObA members for their diligent work, developing statements and delving into the scientific evidence for future potential statements. Many ASA CObA members are participants and leaders at SOAP as well – the two organizations cooperate closely at both the individual and organizational level. I wish to thank SOAP President Heather Nixon for her support, guidance and help at CObA.

I also serve as Alternate Director from California to the ASA Board of Directors and Vice-Chair Quality Management and Departmental Administration and Chair the Educational Track Subcommittee on Obstetric Anesthesia. If you have questions or suggestions, you may contact me via SOAP.

On a personal note – it's been an honor and a privilege to work with and to encourage such a great community of dedicated, brilliant and hardworking colleagues! We all strive to improve the care and outcomes of pregnant people and their babies during labor and beyond the peripartum period, advancing the practice of obstetric anesthesiology.

Mahalo!
Mark

Mark your Calendars!

2025-26 SOAP Board of Directors
Call for Nominations!
Application Deadline: February 11, 2025

SOAP/IJOA Webinar
IJOA Editorial Panel on Writing, Reviewing, Publishing, and Reading
Register to attend!
February 12, 2025 at 5:00-6:30pm EST

SOAP Research Network Symposium
Call for Proposals!
Deadline: February 14, 2025 at 11:59pm EST

(cont'd. - Mark your Calendars!)

Mark your Calendars!

SOAP-FAER Mentored Research Training Grant (MRTG)
FAER.org/SOAP
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SOAP Special Interest Group (SIG)
Establish a new SIG!
Application Deadline: March 5, 2025

SOAP Diversity and Inclusivity Mentored Grant
Learn about proposal requirements and apply!
Application Deadline: March 20,2025 at 11:59 EST

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Make your Hotel Reservation today!
Early Bird Registration by March 31, 2025 at 11:59pm EST

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View event information
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