

PCH Anesthesia Grand Rounds 2026

Beyond the Mask: Rethinking Nitrous Oxide Stewardship in the Modern OR

August 4, 2026 – 7:00 AM

Overall Activity Objectives:

- 1 Increase competence in applying pediatric-specific anesthetic approaches and strategies.
- 2 Improve performance by standardizing perioperative safety practices and communication workflows
- 3 Enhance patient outcomes by reducing adverse events and improving perioperative efficiency and recovery in children
- 4 Reduce perioperative adverse events (e.g., hypoxia, laryngospasm, PONV) through standardized risk-screening and escalation pathways.
- 5 Strengthen real-time feedback and debriefing culture to boost team adaptability and reduce repeated errors.
- 6 Reduce preventable harm, modernize perioperative systems, and support the safest anesthesia care possible for children

Session Objectives:

- 1 Identify the primary sources of nitrous oxide waste in the hospital setting, distinguishing between clinical use and nonclinical infrastructure losses.
- 2 Describe the environmental impact of nitrous oxide as both a greenhouse gas (with a 114-year atmospheric lifetime) and an ozone-depleting substance.
- 3 Evaluate the evidence supporting the transition from central pipeline N₂O supply to portable cylinder systems as the highest-impact mitigation strategy.

Accreditation Statement:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The University of Arizona College of Medicine - Tucson and Phoenix Children's. The University of Arizona College of Medicine - Tucson is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Arizona College of Medicine - Tucson designates this Live Activity for a maximum of 1.00 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity contributes to the CME component of the American Board of Anesthesiology's redesigned Maintenance of Certification in Anesthesiology[™] (MOCA®) program, known as MOCA 2.0®. Please consult the ABA website, www.theABA.org, for a list of all MOCA 2.0 requirements.

Relevant Financial Relationships Statement(s):

University of Arizona College of Medicine - Tucson Office of Continuing Medical Education adheres to the ACCME's Standards for Integrity and Independence in Accredited Continuing Education. Any individuals in a position to control the content of a CME activity, including faculty, planners, reviewers or others are required to disclose all financial relationships with ineligible entities (commercial interests). The CME office reviewers have nothing to disclose. All relevant financial relationships have been mitigated prior to the commencement of the activity.

Name of individual	Individual's role in activity	Nature of Relationship(s) / Name of Ineligible Company(s)
Nyemachi Chikere Vizer, MD	Faculty	Nothing to disclose - 07/28/2026
Narasimhan Jagannathan, MD, MBA, Chief of Anesthesia	Activity Director	Nothing to disclose - 09/10/2025



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