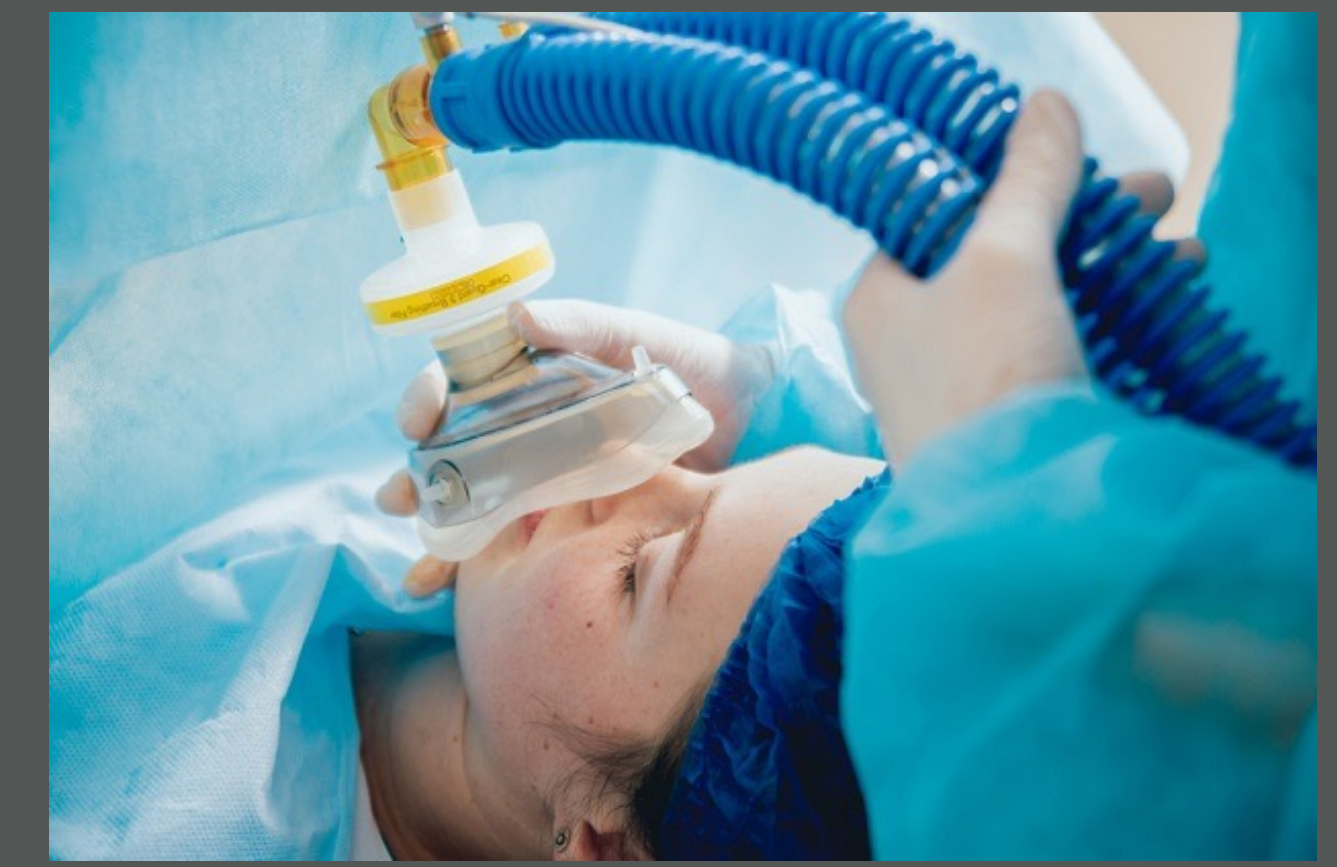# Mock Oral Board Examination in Nurse Anesthesia Education

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OHSU

Background

- Despite its widespread use in anesthesia residency training, mock oral board examination (MOBE) is not part of the pedagogy of most nurse anesthesia programs (NAPs).
- MOBEs test higher order cognitive functions that are difficult to assess via other modalities and that are essential for the safe practice of anesthesia.
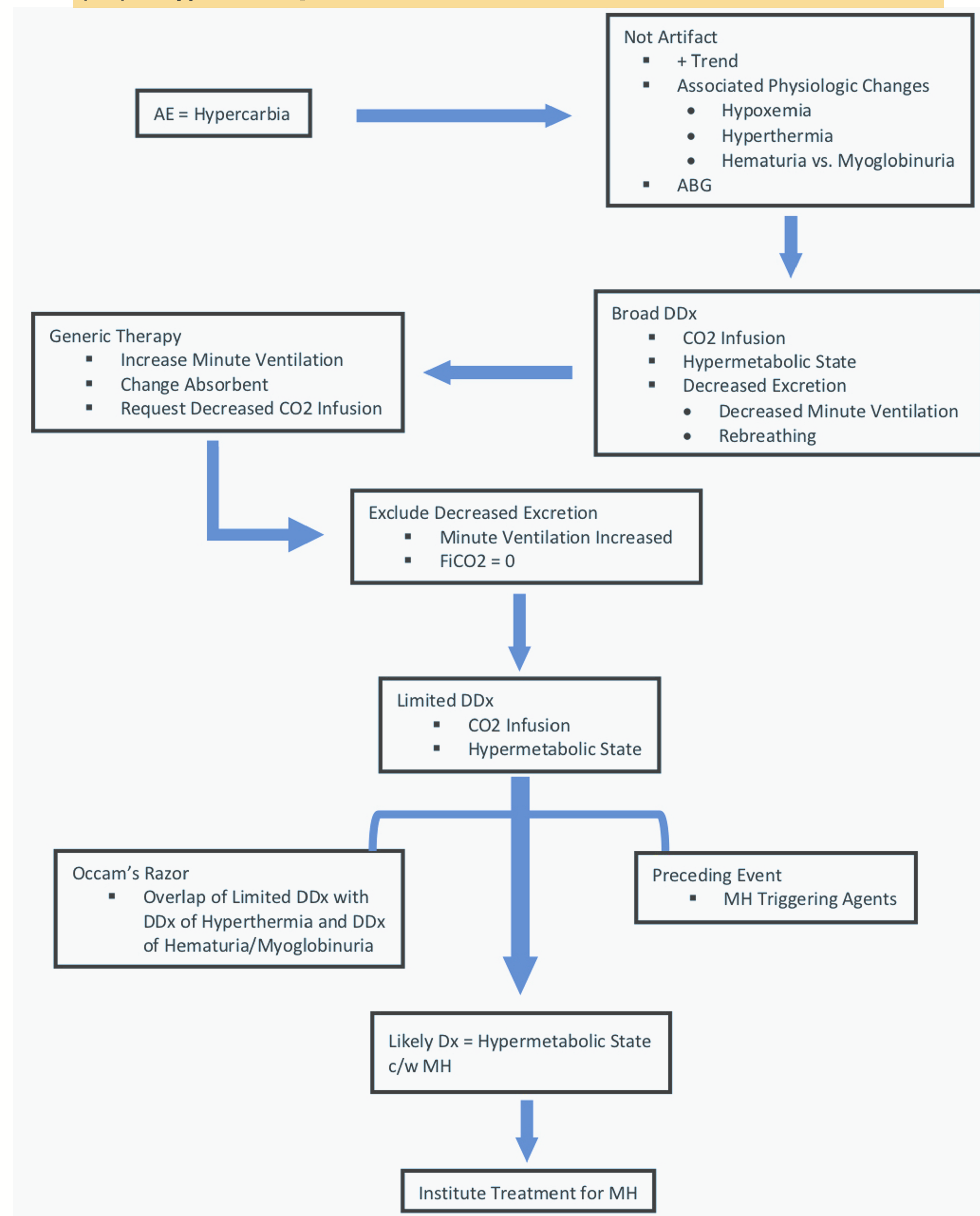
Objective

- To determine whether MOBE in an NAP is feasible, acceptable, reliable and/or useful for identification of problems associated with critical thinking.

Methods

- 10 students who had completed 14 months of the OHSU Master of Nursing NAP constituted the research cohort.
- Each MOBE consisted of a clinical "stem" followed by questions related to that stem.
- MOBEs were scored independently by 3 raters according to a common rubric and final scores were then reconciled.
- Responses from pre-test and post-test questionnaires as well as scoring data were analyzed.

Post-test Questionnaire	M (SD)
I feel that the MOBE was a valuable educational exercise	4.8 (SD 0.4)
I feel MOBE helped identify a relative weakness in my skills related clinical analysis	4.8 (SD 0.4)
I feel MOBE helped identify a relative weakness in my fund of anesthesia knowledge	4.9 (SD 0.3)
I feel MOBE helped identify a relative weakness in my communication skills	4.6 (SD 0.5)
I wish to repeat this exercise in the future	4.5 (SD 0.5)

1 = Strongly Disagree;
2 = Somewhat Disagree;
3 = Neither Agree Nor Disagree;
4 = Somewhat Agree;
5 = Strongly Agree

Example of Critical Thinking Algorithm in Category IIc [Adverse Event (AE) = Hypercarbia]

Results

- MOBEs were administered in a **problem-free manner** to nurse anesthesia students.
- There was 100% pre-reconciliation **pass-fail agreement** among the raters in all areas tested.
- The scoring was characterized by **elements of internal consistency,** with all raters identifying the same areas of maximum underperformance and the same area of highest performance.

Primary Conclusion

- The most important finding of this small-scale study is the **high level of acceptance of MOBE by a cohort of NAP students who previously never had been exposed to oral examinations**. Students uniformly perceived the MOBE as a valuable educational exercise, desired to repeat it, identified common areas of underperformance, and – in the process – did not lose confidence in their clinical abilities.

Scoring Rubric

Category	Subset	Score
I Clinical Analysis	Cancels/postpones surgical cases appropriately predicated on sound judgment and evidence- based medicine	2.1 (SD 0.8)
	Provides a complete differential diagnosis of major clinical problems	1.7 (SD 0.5)
	Troubleshoots intraoperative problems in a meticulous and organized manner	1.6 (SD 0.5)
II Fund of Anesthesia Knowledge	Chooses appropriate preoperative evaluations and interventions	1.9 (SD 0.3)
	Chooses appropriate intraoperative monitors and anesthesia methodology	2.4 (SD 0.5)
	Chooses appropriate anesthesia management predicated on a clear understanding of the patient's pathophysiology	1.6 (SD 0.5)
III Communication Skills	Student's answers specifically address the question asked, and they are presented in a succinct, well-organized format.	2.9 (SD 0.3)
	Student speaks clearly with appropriate volume and makes good eye contact.	2.8 (SD 0.4)
	Student body language, posture, and movements are appropriate.	2.8 (SD 0.4)

1 = Needs Improvement; 2 = Marginal Pass; 3 = Pass