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“The Effects of Cognitive Aids on Improving Performance in Simulated High-Stakes Perioperative Events”

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Summary: In the last decade the use of high-fidelity simulation has been increasingly employed in training for rare, high-stakes events. However, the best educational methodology for training anesthesiologists to safely and expertly handle these emergencies remains unknown. Accordingly, the hypothesis of the current study is that the use of cognitive aids during simulations of rare, high-stakes events in the perioperative setting will improve anesthesia crisis resource management. This hypothesis will be tested in a randomized trial that will evaluate the effects of cognitive aids on initial performance and retention of skill of anesthesia residents (at 3, 6, and 12 months) during high-fidelity simulations of cardiac arrest and other perioperative high-stakes events (e.g. malignant hyperthermia, local anesthetic toxicity) in a simulation laboratory and during in-situ simulation.