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SUBMISSION ROLE: Research and Innovation Abstracts

PRESENTATION TYPE: Oral or Poster

ABSTRACT BODY:

Short Description: The authors present the process of updating an existing intensive first month curriculum for residents. Our new, innovative, and engaging curriculum was designed utilizing existing national resources via free internet searches. The curriculum incorporated simulation and promoted learner engagement through the use of an "Olympics" style contest.

Abstract: Purpose: After completing their intern year, all residents in anesthesiology must complete an intensive one month training program. The goal of this curriculum is to ensure our residents have the appropriate background knowledge and clinical skills to begin practicing anesthesia independently (in supervised settings). Our goal was to develop a new one month curriculum that was engaging, interactive, low cost, and utilized existing validated resources.

Methods: In July 2014, a new CA1 curriculum was implemented in the Department of Anesthesiology and Perioperative Medicine in our single-institution academic medical center. To gain a sense of what kind of training is implemented at other institutions, we searched PubMed using "anesthesia resident AND curriculum", MedEdPORTAL for all anesthesia topics, and Google using "CA1 lecture series". Programs that included a full CA1 lecture schedule were included as were interesting ideas from the literature in PubMed and MedEdPORTAL. All resources were analyzed and a list of critical topics was compiled. The department's simulation team selected the topics most applicable to junior residents and designed the curriculum and simulations that coincided with learning objectives; the program director and department chair approved the curriculum. Participants in our CA1 Olympics earned points for attending lectures, answering questions correctly, completing a scavenger hunt, taking their first call, and % improvement in their Anesthesia Knowledge Test (AKT) pre- and post-curriculum. Prizes of extra textbook money (total of \$500) were awarded to the gold, silver, and bronze medalists upon curriculum completion.

Results: Based on search results: 8 anesthesia programs were identified with open access to their lecture schedules, 17 programs listed the existence of their CA1 lecture series without a schedule, three included an airway workshop, one included a tour, zero included high fidelity simulation, zero included a contest. Three included year-long CA1 lecture series and one included a two month CA1 lecture series. MedEdPORTAL provided 80 published anesthesia simulations and lectures; the PubMed search produced five applicable publications. After compilation of search results, 59 topics and simulations were identified as high-yield for our learners. Due to time restraints, the top 49 topics were included in our month-long curriculum in the

form of: 21 lectures, 5 high-fidelity simulations, 8 low-fidelity simulations, 3 facility tours (scavenger hunt based on Wecksell *et al.* previously published work, OR, and blood bank), and 3 workshops. Workshops were given on use of the anesthesia machine, items in a code box, and how to program a pump. Low-fidelity task trainers were used to teach the following skills: placing oral and nasal airways, mask ventilation, intubation, modes of ventilation with a teaching ventilator, and placement of LMAs, intravenous lines, and arterial lines. High-fidelity simulation topics included: capnography, medication safety and errors, NPO guidelines, anesthesia for obese patients, anesthesia for laparoscopic procedures, and management of common intraoperative events based on previous work by Elinas *et al.* The Olympics was modeled after Rebel, A. DiLorenzo, A. *et al.*'s publication entitled "Objective Assessment of Anesthesiology Resident Skills Using an Innovative Competition-Based Simulation Approach".

Conclusions: By utilizing existing national resources, incorporating simulation, and providing a structured contest, we developed an updated intensive first month curriculum for our incoming residents. This process can be followed by other training programs who are interested in updating old curricula and implementing a more intensive "boot camp" type of program for their learners.

References: 1. Wecksell M, Vick A. The Use of a Scavenger Hunt in CA - 1 Orientation to Facilitate Rapid Identification and Location of Anesthetic Equipment. MedEdPORTAL Publications; 2013. Available from: <https://www.mededportal.org/publication/9506>
2. Novalija J, Henry A, Ellinas H. Anesthesia Core Skill Simulation Package for Anesthesia Newbies. MedEdPORTAL Publications; 2011. Available from: <https://www.mededportal.org/publication/9051>
3. Rebel A, DiLorenzo A, Fragneto RY, Dority JS, Rose GL, Nguyen D, Hassan ZU, Schell RM. Objective Assessment of Anesthesiology Resident Skills Using an Innovative Competition-Based Simulation Approach. AA Case Rep. 2015; Sept 1;5(5): 79-87

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