Airway Relay Race

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Safe, competent, and expedient airway management is a vital skill in EM. Simulation is now a key way this skill is taught, but keeping the learner engaged is a frequent hurdle when performing the repetitive deliberative practice necessary to achieve mastery. Yet this practice is crucial to skills acquisition prior to their use in the high-stakes environment of the ED. The creation of an “Airway Relay” competition offers a way to increase the engagement of learners by exploiting the competitive nature inherent in most EM physicians.

The setup consists of 5 TruCorps variable anatomy intubation heads, a Laerdal SimMan 3G, six iPads (flip cards may substitute), as well as a variety of airway devices available in our ED. The intervention took place at a four-year academic residency program utilizing 48 residents as our learners. Each resident belongs to a “Family” that competes on a recurring basis in team-based educational activities. We divided the residents into their families resulting in approximately six residents on a team. At the base of each intubating head is an iPad displaying a case scenario and images or videos supporting the case. The rules of engagement allow each team to intubate one mannequin at a time. The team with the shortest total time wins.

Conceived of as a fun race the relay turned into a great learning activity for all involved. Instead of just diving straight in and breaking teeth to obtain the quickest tubes the residents used care and precision in choosing devices and performing the intubations. A post-session survey showed that the vast majority found the day useful, worthwhile, and engaging.

Future directions include use with attending faculty and incorporating more procedures. Limitations include but are not limited to determining the winner strictly by time as technique is at least as important. There also exist the limitations posed by number and type of mannequins available. Despite these limitations the activity was very positive.