



ROI MOMENTS: SIMULATOR EVALUATION

SITUATION

To best train medical students and prepare them for the rigors of actual surgery and avoid introducing risk to the patient population, simulators are being used for rehearsal. Most simulators look like the procedures they're intended to reflect, **however, many don't represent the true experience.**

ACTION

Knowing this, a user performance on a popular endoscopic simulator was monitored and assessed. Novice, intermediate, and expert medical professionals performed tasks so that we could assess performance

Analysis indicated that expert participants performed at an equivalent level to novice users. **Intermediate users performed at a higher level than all other participants.**

Post-experimental expert interviews suggested that the simulator *looked* like a real procedure but did not *feel* like one.

FINAL RESULT

A well-modeled system should help less experienced users learn expert strategies. Yet, experts struggled as much as novices in performing a simple endoscopic task.



These results suggest that the simulator's design is more prescriptive than descriptive, relying on how designers believe the procedure *should* be done rather than accounting for variations in how it *is* done. Recommendation was to develop context-based formative models in future designs.