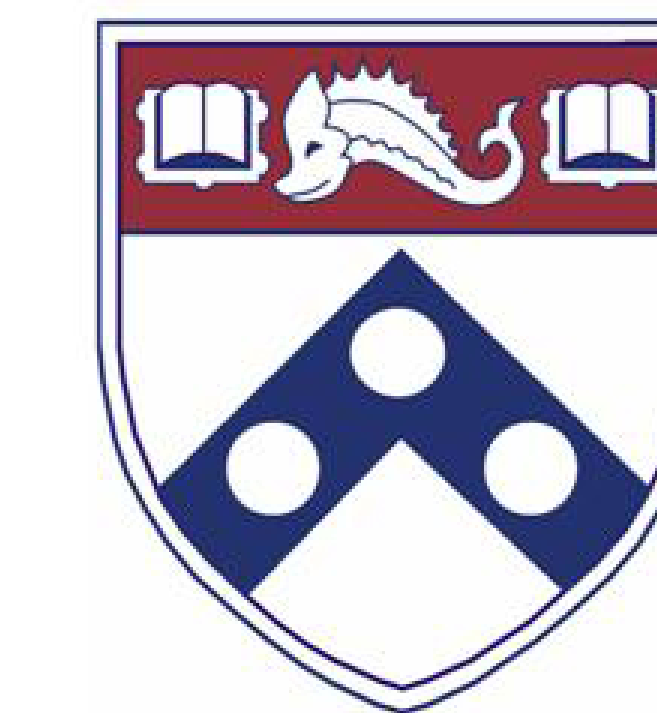


Low Fidelity Simulation Model for Percutaneous Endoscopic Gastrostomy (PEG) Tube Placement



Mayank K. Mittal, MD MRCS, Noel N. Williams, MD, FRCGI, Keith Kreitz, MD, Olugbenga Okusanya, BA, Daniel A. Hashimoto, BA, Andrew S. Resnick, MD, MBA, Kristoffel R. Dumon, MD

Penn Surgery Simulation Center, University of Pennsylvania School of Medicine. Philadelphia, Pennsylvania

INTRODUCTION

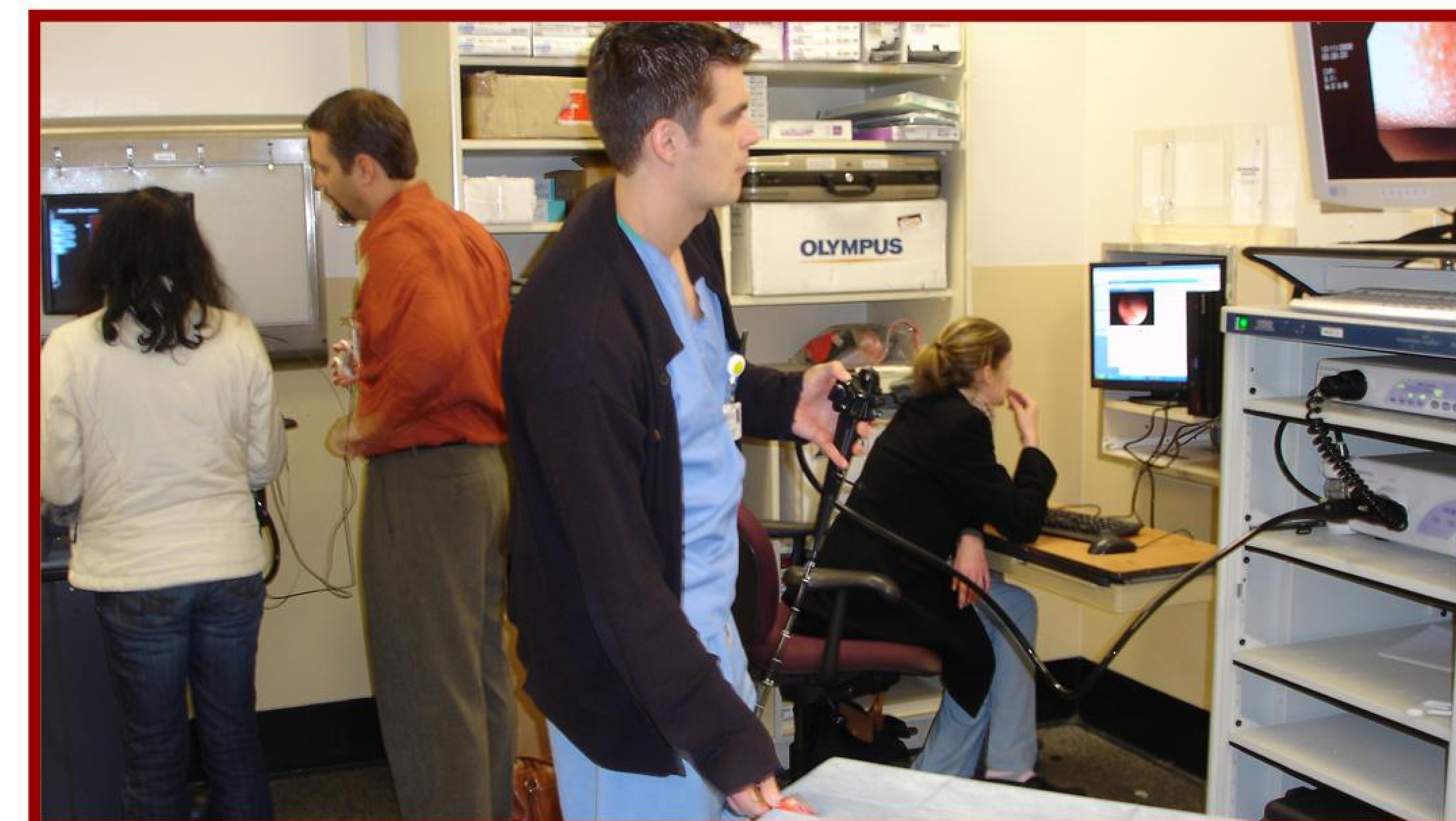
ACGME mandates General Surgery residents to perform 35 upper Endoscopies, including PEG tube insertion. Despite recent advancement in the field of VR Endoscopic Simulators there are no commercially available devices for practicing PEG tube insertion, a procedure routinely performed by inexperienced junior surgery residents.



Close Faculty Supervision

PRIMARY RESULT

9 novices (PGY1=6, PGY2=3) used our model to learn PEG tube insertion and Upper GI Endoscope set-up and trouble shooting. Faculty used a task-specific checklist and a global score to assess the candidates at the end of training. Trainees provided feedback on procedural difficulty and haptics, plus overall realism and perceived educational value of the model using Likert-type scales.



DESCRIPTION OF THE MODEL

Our low fidelity bench model for PEG tube placement includes a simulated upper GI construct, made of foam, and a trans-illuminable abdominal wall. The procedure was performed in the state of the art mock OR. All standard equipment and instruments, including Olympus upper GI Endoscope and PEG kits, were made available to enhance realism.

CONCLUSION

Training on our model enhanced the manual dexterity as well as familiarity with the procedure. Resident found training on our model more realistic and stimulating, as compared to GI Mentor alone. We propose this proficiency based Endoscopy training model to provide a safe controlled learning environment for surgery residents and reduce risks for patients inherent to skills acquisition.

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