

Simulation-Based Education

Modern approach to resident training

Recent Simulation Publications by Northwestern Faculty:

- Mikhaeil-Demo Y, Holmboe E, Gerard EE, Wayne DB, Cohen ER, Yamazaki K, Templar JW, Bega D, Culler GW, Bhatt AB, Shafi N, Barsuk JH. Simulation-based Assessments and Graduating Neurology Residents' Milestones: Status Epilepticus Milestones. *J Grad Med Educ*; 2021; 13(2):223-230.
- Barsuk JH, Cohen ER, Cameron KA, Grady KL, Wilcox JE, Shanklin KB, Harap RS, Nonog GP, Wayne DB. Short-term Retention of Patient and Caregiver Ventricular Assist Device Self-care Skills after Simulation-based Mastery Learning. *Clin Simul Nurs*; 2021;53(9):1-9.
- Bhasin A, Bregger M, Kluk M, Park P, Feinglass J, Barsuk JH. Exertional Hypoxia in Patients without Resting Hypoxia is an Early Predictor of Moderate to Severe COVID-19. *Intern Emerg Med*; 2021;26:1-7.
- Wilcox JE, Harap RS, Stosor V, Cohen ER, Grady KL, Cameron KA, Scholtens DM, Wayne DB, Shanklin KB, Nonog GP, Schulze LE, Jirak AM, Magliola GC, Barsuk JH. Effect of Ventricular Assist Device Self-care Simulation-based Mastery Learning on Driveline Exit Site Infections: A Pilot Study. *J Cardiovasc Nurs*; 2021. doi:10.1097/JCN.0000000000000824. Epub ahead of print.
- McGaghie WC, Wayne DB, Barsuk JH, Issenberg B. Deliberate Practice and Mastery Learning Contributions to Medical Education and Improved Healthcare. *J Expertise*; 2021; 4(2):144-168.
- Patel RV, Barsuk JH, Cohen ER, Wani SB, Rastogi A, McGaghie WC, Wayne DB, Keswani RN, Kommanduri S. Simulation-based Training Improves Polypectomy Skills Among Practicing Endoscopist. *Endosc Int Open*; 2021; 9(11): e1633-e1639.
- Amick AE, Feinsmith SE, Sell J, Davis EM, Wayne DB, Feinglass J, Barsuk JH. Ultrasound-guided Peripheral Intravenous Catheter Insertion Training Reduces Use of Midline Catheters in Hospitalized Patients with Difficult Intravenous Access. *J Patient Saf*. 2021; doi:10.1097/PTS.0000000000000910. Epub ahead of print.
- Feinsmith SE, Amick AE, Feinglass J, Sell J, Davis, EM, Spencer TR, Koepke L, Pastoral J, Wayne DB, Barsuk JH. Performance of Short Peripheral Catheters Inserted with Ultrasound Guidance Versus Landmark Technique after a Simulation-based Mastery Learning Intervention. *J Vasc Access*. 2021; doi: 10.1177/112972982111044363. Epub ahead of print.
- Issa N, Liddy WE, Samant S, Conley DB, Kern RC, Hungness ES, Cohen ER, Barsuk JH. Effectiveness of a Simulation-based Mastery Learning to Train Clinicians on a Novel Cricothyrotomy Procedure at an Academic Medical Center During a Pandemic: A Quasi-experimental Cohort Study. *BMJ Open*. 2021; 11:e054746.
- Harap R, Cameron KA, Cohen ER, Grady KL, Wilcox JE, Scholtens DM, Barsuk JH. Ventricular Assist Device Self-care Education at Tertiary Care Medical Centers. *ASAIO J*. 2022; doi: 10.1097/MAT.0000000000001673.
- Ballard HA, Hajduk BS, Cheon EC, King MR, Barsuk JH. Clinical and Demographic Factors Associated with Pediatric Difficult Intravenous Access in the Operating Room. *Pediatr Anesth*. 2022; 32(7): 792-800.

Northwestern Internal Medicine has been a national leader in teaching residents using Simulation Based Medical Education (SBME) since 2006.

See our full bibliography of simulation based curriculum on our residency website under 'curriculum': www.medicine.northwestern.edu.

