

NORTHWESTERN SIMULATION PUBLICATIONS ON IM RESIDENCY SIMULATION-BASED TRAINING

Intern Boot Camp/Critical Care Skills:

Use of simulation-based education to improve resident learning and patient care in the medical intensive care unit: a randomized trial. Schroedl CJ, Corbridge TC, Cohen ER, Fakhran SS, Schimmel D, McGaghie WC, Wayne DB. *J Crit Care*. 2012 Apr;27(2):219.e7-13.

Making July safer: Simulation-based mastery learning during intern boot camp. Cohen ER, Barsuk JH, Moazed F, Caprio T, Didwania A, McGaghie WC, Wayne DB. *Acad Med*. 2013;88(2):233-239.

First-year residents outperform third-year residents after simulation-based education in critical care medicine. Singer BD, Corbridge TC, Schroedl CJ, Wilcox JE, Cohen ER, McGaghie WC, Wayne DB. *Simul Healthc*. 2013 Apr;8(2):67-71.

Retention of critical care skills after simulation-based mastery learning. Moazed F, Cohen ER, Furiasse N, Singer B, Corbridge TC, McGaghie WC, Wayne DB. *J Grad Med Educ*. 2013 Sep;5(3):458-63.

Central Line Insertion:

Barsuk JH, Cohen ER, Nguyen D, Mitra D, O'Hara K, Okuda Y, Feinglass J, Cameron KA, McGaghie WC, Wayne DB. Attending physician adherence to a 29-component central venous catheter bundle checklist during simulated procedures. *Critical Care Medicine*. 2016; 44(10):1871-81.

Use of simulation-based education to reduce catheter-related bloodstream infections. Barsuk JH, Cohen ER, Feinglass J, McGaghie WC, Wayne DB. *Arch Intern Med*. 2009 Aug 10;169(15):1420-3.

Simulation-based mastery learning reduces complications during central venous catheter insertion in a medical intensive care unit. Barsuk JH, McGaghie WC, Cohen ER, O'Leary KJ, Wayne DB. *Crit Care Med*. 2009 Oct;37(10):2697-701.

Long term retention of central venous catheter insertion skills after simulation-based mastery learning. Barsuk JH, Cohen ER, McGaghie WC, Wayne DB. *Acad Med*. 2010;85(10 Supp): S9-12.

Dissemination of a simulation-based mastery learning intervention reduces central line-associated bloodstream infections. Barsuk JH, Cohen ER, Potts S, Demo H, Gupta S, Feinglass J, McGaghie WC, Wayne DB. *BMJ Qual Saf*. 2014 Sep;23(9):749-56.

ACLS:

Mastery learning of advanced cardiac life support skills by internal medicine residents using simulation technology and deliberate practice. Wayne DB, Butter J, Siddall VJ, Fudala MJ, Wade LD, Feinglass J, McGaghie WC. *J Gen Intern Med*. 2006 Mar;21(3):251-6.

Simulation-based education improves quality of care during cardiac arrest team responses at an academic teaching hospital: a case-control study. Wayne DB, Didwania A, Feinglass J, Fudala MJ, Barsuk JH, McGaghie WC. *Chest*. 2008 Jan; 133(1):56-61.

Progress toward improving the quality of cardiac arrest medical team responses at an academic teaching hospital. Didwania A, McGaghie WC, Cohen ER, Butter J, Barsuk JH, Wade LD, Chester R, Wayne DB. *J Grad Med Educ.* 2011 Jun;3(2):211-6.

Retention of critical care skills after simulation-based mastery learning. Moazed F, Cohen ER, Furiasse N, Singer B, Corbridge TC, McGaghie WC, Wayne DB. Journal of Graduate Medical Education. 2013;5:458-463.

Goals of Care Conversations:

Improving residents' code status discussion skills: a randomized trial. Szmuilowicz E, Neely KJ, Sharma RK, Cohen ER, McGaghie WC, Wayne DB. J Palliat Med. 2012 Jul;15(7):768-74.

Unpacking resident-led code status discussions: results from a mixed methods study. Sharma RK, Jain N, Peswani N, Szmuilowicz E, Wayne DB, Cameron KA. J Gen Intern Med. 2014; 29(5):750-7.

Thoracentesis:

Barsuk JH, Cohen ER, Williams MV, Scher J, Feinglass J, McGaghie WC, O'Hara K, Wayne DB. The effect of simulation-based mastery learning on thoracentesis referral patterns. Journal of Hospital Medicine. 2016;11(11):792-795.

Mastery learning of thoracentesis skills by internal medicine residents using simulation technology and deliberate practice. Wayne DB, Barsuk JH, O'Leary KJ, Fudala MJ, McGaghie WC. J Hosp Med. 2008 Jan;3(1):48-54.

Simulation-Based Mastery Learning for Thoracentesis Skills Improves Patient Outcomes: A Randomized Trial. Barsuk JH, Cohen ER, Williams MV, Scher J, Jones SF, Feinglass J, McGaghie WC, O'Hara K, Wayne DB. Acad Med. 2018 May;93(5):729-735.

Paracentesis:

Simulation-based education with mastery learning improves paracentesis skills. Barsuk JH, Cohen ER, Vozenilek JA, O'Connor LM, McGaghie WC, Wayne DB. J Grad Med Educ. 2012 Mar;4(1):23-7.

Cost savings of performing paracentesis procedures at the bedside after simulation-based education. Barsuk JH, Cohen ER, Feinglass J, Kozmic SE, McGaghie WC, Ganger D, Wayne DB. Simul Healthc. 2014 Oct;9(5):312-8

Lumbar puncture:

Simulation-based education with mastery learning improves residents' lumbar puncture skills. Barsuk JH, Cohen ER, Caprio T, McGaghie WC, Simuni T, Wayne DB. Neurology. 2012 Jul 10;79(2):132-7.