transfer population at our institution. In order to help inform and develop a resident curriculum around ED transfers.

Methods: This is a retrospective chart review with a primary outcome measure of diagnostic error in the ED transfer population. Diagnostic error was defined as a discrepancy between the diagnosis made by the EM attending notes and the final diagnosis made by the admission team on discharge. The study was performed at an urban, academic tertiary care referral center with an affiliated 3 year EM residency. All patients transferred to the ED between 07/2016 and 09/2016 were eligible. There were 1785 ED transfer patients during this time period. We did a power calculation using an error rate of 0.13% (from previous published data from our institution for all-comers) with an expected error rate of 2% in the ED transfer population requiring at least 102 cases for an alpha of 0.05% and power of 80%. Individual records of 143 randomly selected patients were reviewed. Diagnostic discrepancies between these items were reviewed by two blinded attending physicians and adjudicated as errors if the diagnosis occurred within the first 24 hours of the hospitalization, was not documented for in the ED note and if the two reviewers agreed it was a missed ED diagnosis.

Results: The average age was 60 for the population studied and 51% were male. Four errors were found among the 143 patients for an error rate of 2.8% (CI 0.1-5.5). Diagnostic errors from all-comer ED population to the ED transfer population were compared (p= 0.002).

Conclusions: In this single tertiary center study, the diagnostic error rate was found to be 21 times higher in the ED transfer population than all comers to the ED.This could be due to multiple issues, including the fact that many patients are transferred to a tertiary care facility because they are medically complex or hemodynamically unstable. In this unique population an educational curriculum centered around the transfer population, anchoring bias, and cognitive debiasing strategies may improve care.

8 Ballistic Gelatin Training Models versus Human Models for the Training of Emergency Physicians Resident Physicians in the Sonographic Evaluation of Deep Vein Thrombosis

Doctor M, Olivieri P, Siadecki S, Rose G, Baranchuk N, Tansek R, Drake A, Saul T/Mount Sinai St. Luke's Mount Sinai West, New York, NY

Background: Trained emergency physicians can perform DVT diagnostic ultrasound with high sensitivity and specificity. Ultrasound education involves a cognitive as well as a technical component. Live models with pathology may not be readily available and commercially available phantoms may be prohibitively expensive. Simulation has been shown to increase learner confidence, reduce complications of procedures, decrease costs, and improve patient outcomes in a number of ultrasound applications.

Objectives: To compare the OSCE and written examination scores of emergency medicine residents who trained on a simulation model we created from ballistics gelatin versus human models.

Methods: Prospective study of 32 PGY 1-3 emergency medicine residents. Institutional Review Board approval was obtained. A 30-minute lecturer reviewed probe selection, lower extremity venous anatomy, and the major diagnostic criteria of compressibility. Each PGY class was split into two groups. Residents in the gelatin phantom group scanned the two phantom models, one with patent "veins" and the other with abnormal areas of non-compressibility. Residents in the human model group scanned two patients, one with a DVT and one healthy volunteer. After the training, residents completed an OSCE as well as a written examination interpreting 14 DVT ultrasound examinations.

Results: The live model and simulation trainer groups had a similar number of previous ultrasound scans performed. There was no statistically significant difference between either of the knowledge assessments for those who trained on the live model or simulation trainer. There were no significant differences between the two groups when asked to rate their preparedness and confidence in performing a DVT ultrasound evaluation.

Conclusions: We were able to create DVT phantom models from ballistics gelatin to train EM residents how to perform and interpret a DVT compressibility study. The phantom modes were inexpensive, durable, and easy to use. OSCE and written examination scores from EM residents that practiced on these phantoms were not statistically significant from those that did their hands-on training on human models. For this application, ballistic gelatin phantom models were as effective as training on human volunteers and may be considered as a cheaper, more readily available alternative.

9 Can a Cognitive Errors Algorithm Improve Clinical Decision-Making Among Medical Students in a Simulation-Based Course?

Wood S, Strother C, Shah K /Mount Sinai Hospital, New York, NY; Mount Sinai Hospital, New York, NY

Background: The study of cognitive errors in emergency medicine has become increasingly popular as physicians seek ways to increase patient safety and minimize patient morbidity and mortality. However, most studies that have focused on cognitive errors are retrospective and thus prone to hindsight bias. Furthermore, it is unclear whether