

## Abstract 20

Title: Improving perceptions of interprofessional collaborative practice for physician, pharmacy, and nursing trainees through an interdisciplinary acute patient stabilization simulation

*Background:* Interprofessional collaborative practice has been shown to improve patient outcomes. The Interprofessional Education Collaborative has established four core interprofessional competency domains to guide education of health professionals: values/ethics, roles/responsibilities, interprofessional communication, and teams/teamwork. Further research on implementing this education is needed.

*Objectives:* To assess the effect of a standardized-patient simulation on students' perceptions of interprofessional education (IPE) across 3 domains: roles/responsibilities, teams/teamwork, and patient outcomes.

*Methods/Design:* Fourth-year medical students (n=41), fourth year pharmacy students (n=17), and nursing trainees (n=22) worked in teams of 3 to simulate stabilization of an acutely ill standardized patient. Teams were precepted by a physician, pharmacist, and nurse. Perceptions of the simulation were assessed using the validated Student Perceptions of Interprofessional Clinical Education-Revised Instrument, version 2 (SPICE-R2, 5-point Likert). Participants completed the SPICE-R2 pre- and post-simulation, with pharmacy students participating in up to 3 simulations. Fisher's exact test was used for categorical variables where N was small (<30-40) and Chi-square otherwise. Student's t-test or ANOVA was used for comparison of continuous variables.

*Results:* Together all learners showed a statistically significant increase in their perceptions of 3 IPE domains: roles and responsibilities for collaborative practice (3.75→4.35,  $p<0.0001$ ), interprofessional teamwork and team-based practice (4.39→4.73,  $p<0.0001$ ), and patient outcomes from collaborative practice (4.29→4.63,  $p<0.0001$ ). Learners in each discipline also showed a statistically significant improvement in perception of each domain ( $p$  values  $<0.001$  to  $0.018$ ), and the mean changes in scores for each domain were not statistically significant between disciplines. Pharmacy student perceptions improved across multiple simulations, although improvement beyond the first simulation remained significant only for perceptions of roles/responsibilities ( $p=0.05$ ). Overall perceptions of IPE significantly differed between the 41 MD students who participated in the IPE simulation (4.12 before vs 4.24 after) compared to the

65 concurrently studied MD students who did not participate (4.09 before vs 4.06 after,  $p=0.046$ ).

*Conclusions:* Interprofessional collaboration during an acute patient stabilization simulation improved learners' perceptions of teamwork, roles and responsibilities, and effect on patient outcomes. Participating in the simulation improved students' perceptions of IPE. These findings support the incorporation of standardized patient-based IPE events even in late-stage education of health professionals.