

Team communication: Reporting the Effectiveness of a Large-Scale Innovative Interprofessional Training Opportunity

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Purpose

Significant challenges face educators in developing and implementing interprofessional trainings. Quantitative demonstrations of the effectiveness of these efforts are often neglected. Through funding from the Josiah H. Macy and Hearst Foundations, the University of Washington Schools of Medicine, Nursing, and Pharmacy, and the MEDEX Physician-Assistant Program (MEDEX) developed a large-scale innovative interprofessional training activity that brought together medical, nursing, pharmacy, and physician assistant (PA) students in a half-day training including didactic instruction and three team simulations.

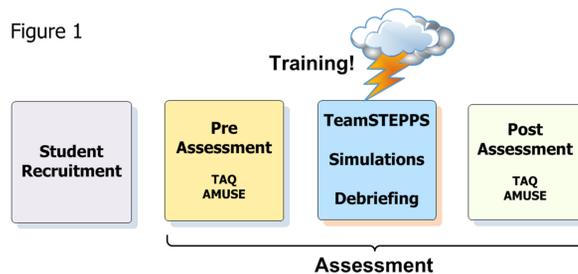


Interprofessional students in one of three team training simulations.

Methods

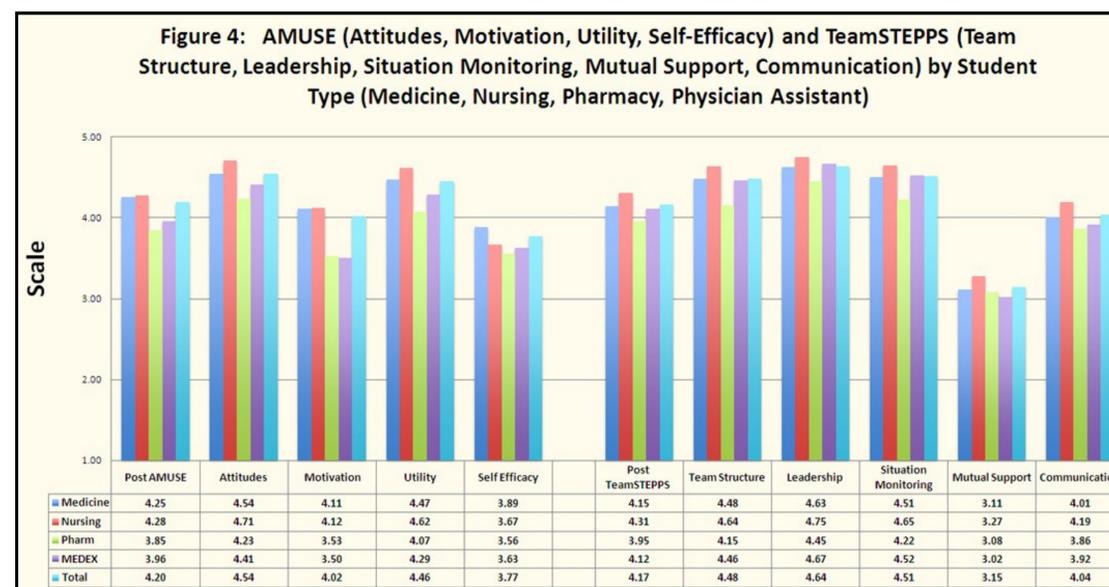
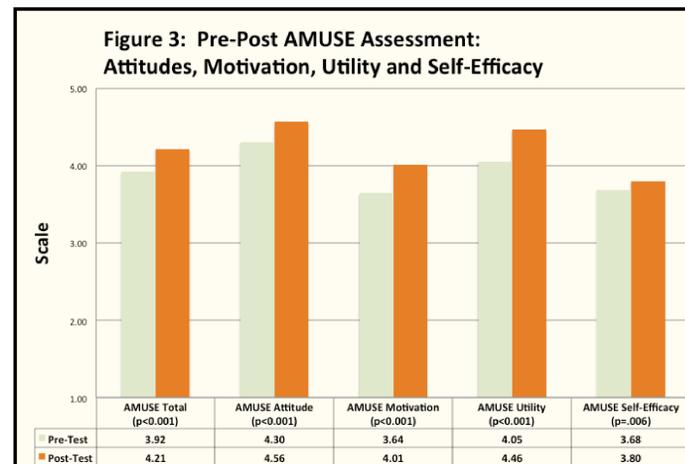
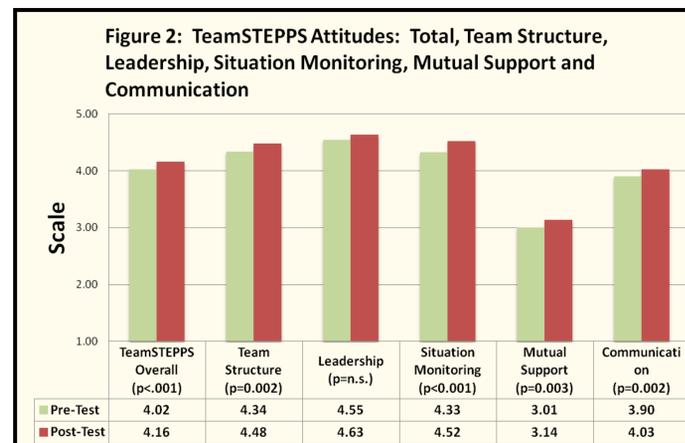
Between May 30th and June 3rd 2011, 306 students completed an Interprofessional Training activity consisting of three simulations and instruction in the **Team Strategies and Tools to Enhance Performance and Patient Safety "TeamSTEPPS"** model. To assess learning we conducted a pre-post assessment of the event including the 21-item **"AMUSE"** instrument to measure **Attitudes, Motivation, Utility, and Self-Efficacy** around the learned skills and the 30-item TeamSTEPPS Attitudes Questionnaire (TAQ). The TAQ is designed to assess changes in attitudes towards the value of Team Structure, Leadership, Situational Monitoring, Mutual Support, and Communication to improving quality of care. All items were measured on a 5-point Likert scale from 5="Strongly Agree" to 1="Strongly Disagree". The pre-assessment was completed two weeks prior to the training and the post 1–3 weeks following training (Figure 1).

Figure 1



Results

255 students (83%) completed the pre and/or the post assessment with 149 (48%) students completing both. Students consistently showed improved understanding of TeamSTEPPS team behaviors (Figure 2) and in their self-reported attitudes, motivation, utility, and self-efficacy around working in interprofessional teams (Figure 3). However, the subscale "Mutual Support" was rated significantly lower than were the other subscales ($p < 0.001$). While some significant differences were noted across disciplines (Figure 4), for example, pharmacy, and physician assistant students reported significantly less positive ($p < 0.001$) impact than did medical or nursing students, the overall experience was generally viewed very positively across all groups (Figure 5). On a 5-point scale with 5="Strongly Agree" the average score was 4.7 reporting that the Capstone was a valuable experience. Preliminary qualitative analysis of student comments revealed one strong theme—the interprofessional student nature of the training was viewed as extremely powerful. Students commonly have few opportunities to work with students from different disciplines and requested more experiences of this nature be developed.



Discussion

Interprofessional training is challenging and often educators neglect to collect measurements demonstrating the effectiveness of training. This pre-post assessment allowed us to capture student perspectives on the value of the training and the perceived benefits of the training. Our findings support the continuance of similar training efforts with reliable instruments that suggest a positive shift in knowledge and in attitudes.



Conclusion

- Students responded positively to interprofessional training.
- Students reported having good initial skills around working within interprofessional teams, but responded positively and demonstrated measurable improvements in their attitudes and self-efficacy following interprofessional training.
- Students strongly desire opportunities to work and learn with students from disciplines other than their own.
- Experiences that provide opportunities to experience "Mutual Support" should be expanded and refined.
- Expand and refine pharmacy and physician assistant roles to better ensure their full engagement in the activities.

