

## **Virtual Medical Training for Improved Outcomes**



A team of researchers from the College of Nursing (CoN) and NYU School of Medicine (SoM) are addressing the barriers to wide-spread adoption of interprofessional education (IPE) as it can play an important role in achieving the aim of better care, better outcomes and reduced healthcare costs. The paper on the initiative titled "E-Learning with virtual teammates: A novel approach to interprofessional education," is published in the *Journal of Interprofessional Care*.

The team, led by Maja Djukic, PhD, RN, assistant professor at the CoN, and Marc Triola, MD, associate professor of medicine at the SoM has designed a virtual IPE curriculum in which students were paired with a virtual team member to learn with, from, and about each other to improve collaboration and the delivery of care.

The authors point out that virtual IPE is an efficient and effective learning tool and offers significant benefits to medical and nursing schools that do not have a partner school. Morever, the IPE components can be implemented without any cost on the on NYU School of Medicine's Division of Educational Informatics website.

"Until the turn of the century, it was conventional for doctors, nurses, physician assistants, pharmacists and other healthcare professionals to be educated independently of one another," said Djukic. "The problem," explains Triola, "was that this model created a culture of fractured communication between medical professionals of different disciplines. Now we realize the whole is greater than the sum of its parts, provided the pieces fit together."

During their research, the team administered virtual teammates to 540 students, and compared their outcomes with those of 220 students who had taken the traditional blended-learning curriculum a year prior. The results were measured through multiple-choice tests before and after the modules were administered. Changes in teamwork ability and attitudes were also measured.

The findings showed that for nursing students, gains in the virtual learning cohort were much higher compared to the blended learning cohort in terms of team members' roles and responsibilities, teams and team work, communication and conflict resolution, and interprofessional care planning. No disadvantages were observed with the IPE approach over the blended-learning approach.

For medical students, the gains in knowledge, team skills and learning efficiency were comparable between the virtual and blended learning cohorts. The virtual cohort showed greater improvement in shared leadership while for team value, the blended-learning cohort improved more. Changes in team skills and attitudes were similar between the two approaches.

The findings of this study are consistent with previous research and add to the evidence that a virtual learning approach is not less effective than a blended-learning approach.

Source: New York University

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Published on: Mon, 27 Jul 2015