



Improving Professional Competence through the use of Healthcare Technology in Clinically-Based Courses



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Description of Project

- This inter-professional pilot was implemented in academic year 2014-2015
- Junior level nursing and respiratory students received access to a web-based, simulated electronic health record (EHR).
- The EHR is incorporated into patient scenarios and focuses on common conditions not often experienced or managed by pre-licensure students in the clinical setting.
- Each scenario requires student utilization of the EHR prior to, and during simulation, to enhance assessment of the patient through reviewing Past Medical History (PMH), current orders, and lab/test results.
- Students use this information to work as a team to provide patient-centered care, safely administer medications, and refine documentation skills.

Methods

Pre-test/Post-test Design

- **Pre-Test:** Students were given a “scavenger hunt” in which they were required to locate and answer questions concerning a particular patient. The pre-test was timed and scored for accuracy.
- **Project:** Ten validated NLN simulation scenarios were conducted. The students prepared for the simulation by researching the patient in the EHR prior to the scheduled simulation. During the simulation students were required to:
 - Demonstrate critical thinking
 - Utilize the EHR
 - Administer medications
 - Perform procedures
 - Maintain patient safety
- **Post-Test:** Students were given the same “scavenger hunt” which was again timed and scored for accuracy.
- **Other Outcomes Measures:** Student satisfaction survey via faculty led student focus groups were conducted.

Contact Information

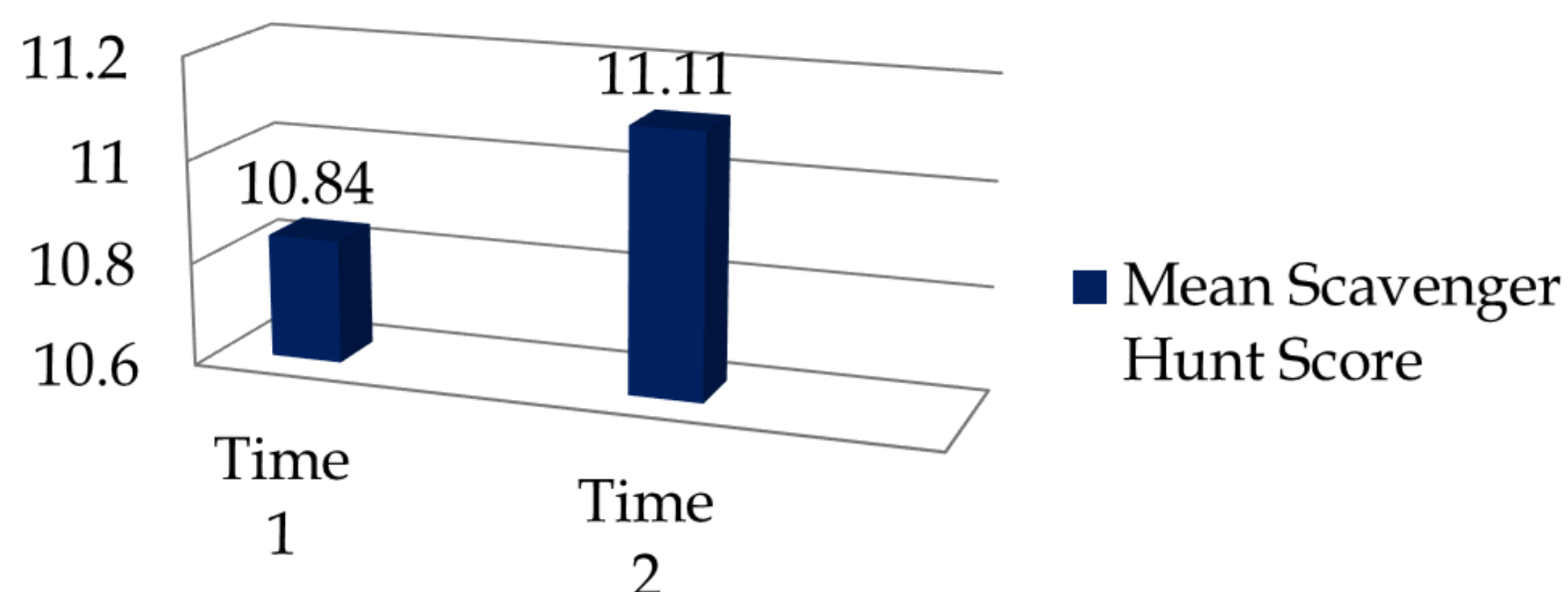
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Simulation Topics

GI Bleeding	Renal Colic
Heart Failure	Acute Kidney Injury
CVA	Liver Cirrhosis
Hip Fracture	Pancreatitis
Spinal Cord Injury	Sickle Cell Crisis

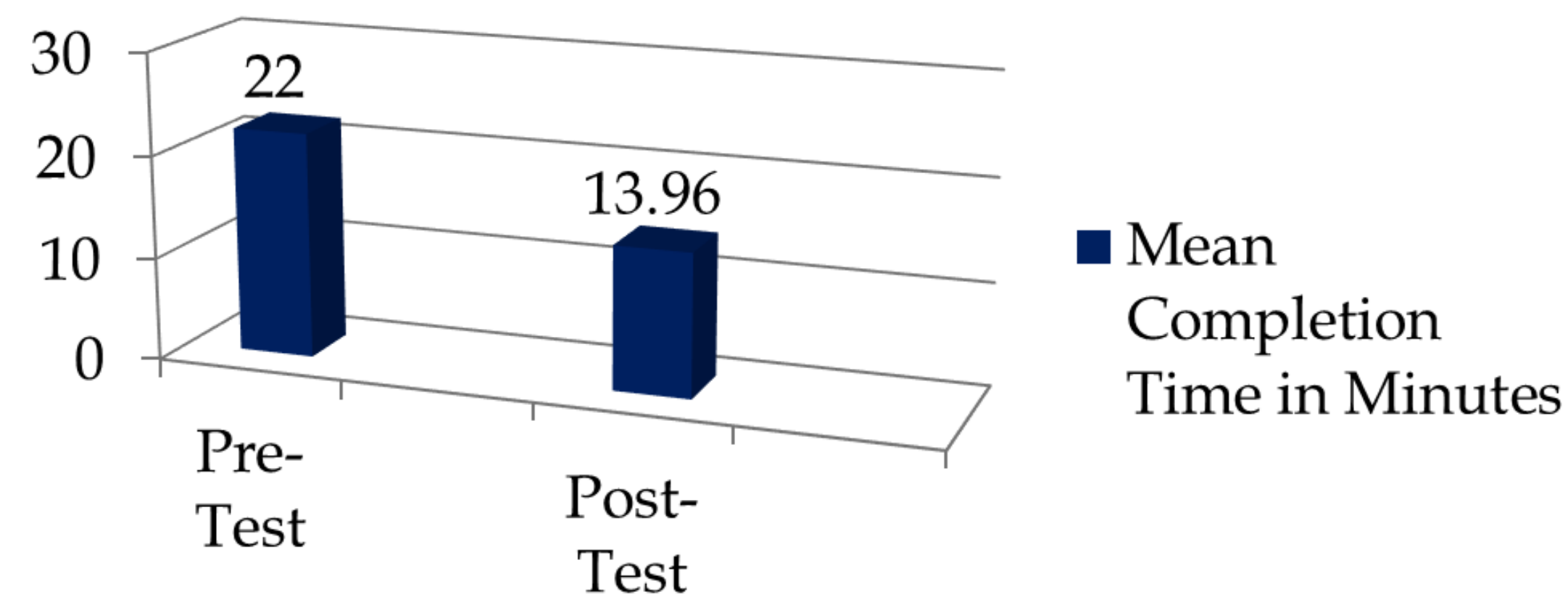
Results

Mean Scavenger Hunt Score



NS, p=.395

Mean Completion Time in Minutes



P<.000

Focus Group Themes

Novice

“I feel like some of the situations we would never be in without a doctor, so maybe like for some of the situations, there would be a teacher that could come in and act like a doctor. I feel like we would never have been alone in some of those situations that we were put in.”

Advanced Beginner

“One scenario with a patient he was in his C-5 or something like that was fractured and he kept asking am I going to be able to go to College? Can I do this? And I look at them like I see them now – you’re paralyzed; you can’t walk – but they have other concerns: Can I go to med school? You have to think of them as a person.”

Competent

“You have to look at the patient as a whole not just focus on his pain. You have to look at everything you know. Neurological, cardiovascular, etc, etc, including the family and their history and everything, you have to look at it all together.”

Inter-professional

“I think we really liked bringing in other health team care members. It’s something big that we really never thought about before until like a respiratory therapist came in. Like we didn’t even know that they knew like gases and ECG changes. I think it’s cool seeing it from a different perspective. They can take care of a patient’s needs in a whole other way than we can. I think getting other team members involved is huge.”

