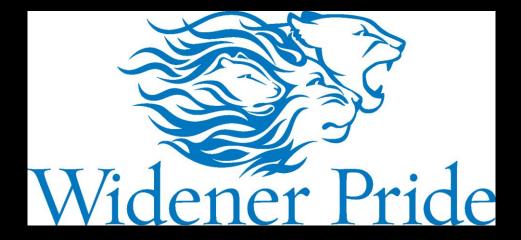
INTERPROFESSIONAL TRANSFERS LABORATORY EXPERIENCE IMPROVES STUDENT ATTITUDES TOWARDS INTERPROFESSIONAL LEARNING, COLLABORATION, TEAMWORK AND SELF-EFFICACY

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REGISTERED NURSE CURRICULUM AROUND INTERPROFESSIONAL LEARNING AND SIMULATION

- Third year of the curriculum-First Semester
 - Student clinical located in Long Term Care Facility
 - Focus on Geriatric Care and providing Fundamentals
 - Interprofessional "transfers and gait" lab with School of Nursing
- Second year second semester:
 - Student clinicals located in Acute Care Hospitals
 - Focus on Acute Care and providing health promotion
 - Lines tubes and monitors (will be interprofessional in 2017)
 - Intraprofessional simulation

PHYSICAL THERAPY CURRICULUM AROUND INTERPROFESSIONAL LEARNING AND SIMULATION

- First year first semester:
 - Interprofessional "transfers and gait" lab with School of Nursing
 - Client Management I (PT 730)
- Second year second semester:
 - High fidelity simulations begin
 - Breath sounds lab
 - Lines tubes and monitors (will be interprofessional in 2017)
 - Intraprofessional simulation
 - Interprofessional simulation (Acute care, Neuro)
 - Medically Complex Patient (PT 820)

INTRODUCTION AND BACKGROUND

- Patients are becoming more medically complex
- 66% of patients over age 65 present with 2 or more comorbidities
- Interprofessional learning (IPL) and collaboration (IPC) improves
 - Patient outcomes
 - Patient safety
 - Patient experience
 - Personal self-efficacy and professional development
 - Personal competency and autonomy
 - (Chevarley, 2015; Adams, 2003; Greiner, 2003; Reeves, 2008)

STUDY PURPOSE

- To examine student perceptions of interprofessional learning (IPL) and collaboration (IPC) following an interprofessional transfers laboratory experience.
- The experience was integrated into the DPT Client Management I (PT730) and BSN Medical Surgical Nursing (RN330) Curriculum at Widener University in Chester, PA.

STUDY PARTICIPANTS

- N= 49 Entry level DPT students (first year of the curriculum)
- N = 136 Undergraduate Bachelor's of Science in Nursing (BSN) students (third year of the curriculum)
- Assigned into groups of 1 DPT and 2-3 BSN students

DATA COLLECTION METHODOLOGY

- Valid and reliable measures of IPC/IPL were used to collect data.
- Surveys were sent to participants one week prior to the experience to collect pre-experience data.
- Students completed their post- survey immediately following the debriefing.
- Measures included the Interprofessional Education Perspective Scale (IEPS), the Readiness for Interprofessional Learning scale (RIPLS), the Attitudes Toward Healthcare Teams Scale (ATHTS), the Confidence for Interprofessional Learning and Cooperation scale (CILC), and the Self-Efficacy for Experiential Learning (SEEL).
- A paired T test was performed using SPSS 21.0 to measure group differences as a result of the experience.

INTERPROFESSIONAL EXPERIENCE

- Prebriefing
 - Didactic lecture about how to transfer a patient
 - Clinical decision making
 - Transfers laboratory expectations and case review
- 90 minute laboratory experience
 - Five scenarios were provided to the students, to allow them to practice transferring a patient out of bed to a chair
 - Variations included different weight bearing statuses, diagnoses and devices).
- Debriefing
 - All students participated in a subsequent 30 minute debriefing that included multiple DPT and BSN subgroups.

VIDEO: INTERPROFESSIONAL TRANSFERS LAB EXPERIENCE

- Three of the third year BSN and one of the first year DPT students interacting around one of the three problem based simulated cases
- <u>https://www.youtube.com/watch?v=Kna-ROa4eLw</u>

RESULTS

- DPT and BSN students showed significant improvements in:
 - IPES
 - Competency and autonomy (p<.002), perceived
 - Need for cooperation (p<.005)
 - Perception of actual cooperation (p<.003) as measured by the IEPS. In addition,
 - RIPLS
 - Team work and collaboration (p<.001)
 - Professional identity (p<.001)
 - ATHTS
 - Team value (p<.001)
 - Team efficiency (p<.001)
 - SEEL
 - Perceptions of self efficacy, with multiple items reaching the significance level of (p<.001).

CONCLUSIONS

- Multiple valid and reliable survey measures show objective improvement in items significant to professional learning and collaboration following an interprofessional transfers laboratory experience.
- Areas of greatest improvement included student perceptions of self efficacy, team work, team value, team efficiency and competency and autonomy.

QUALITATIVE FEEDBACK

BSN feedback

- "The best part of today was getting to know what the physical therapy students know and informing them of what we know and working collaboratively to best care for the patient."
- "Teaching the material helped put my knowledge to practice. Practicing acute setting scenarios with nursing helped demonstrate real life situations in which multiple healthcare professionals will be involved."
- "I gained a better understanding of the responsibilities of nurses, and how we need to work together in a clinical setting. I learned different problem solving techniques that will be needed to accomplish a goal in the real world. It also identified holes in my knowledge of understanding transfers and where I need to spend more time studying."

QUALITATIVE FEEDBACK

DPT feedback

- "For me the best part about this experience was being able to attempt to explain what physical therapist do and how to properly transfer patients while keeping both the nurses and the patients safe. Additionally, it made me realize how much detail we need to make sure that the transfer goes properly. We may know how to do the transfer but teaching it is also important as well."
- "The best part was working together to problem solve and share each other's input. It was neat to see the lens they were looking out of, compared to ours. I loved when decisions overlapped and we came to the same conclusion for the pt while problem solving. "

MODIFICATIONS IN 2016

- PT 3 added as "Mentor"
 - Went into PT 3 class on teaching and learning
 - Discussed "mentorship"
- Nursing diagnoses added to the cases
- Three cases performed instead of five
- Alternated the role of "lead" from DPT to BSN student
- Discussed both nursing and physical therapy priorities around patient assessment/examination
- Discussed differences in nursing and physical therapy "medical language"

REFERENCES

- Chevarley FM: Expenditures by Number of Treated Chronic Condition, Race/Ethnicity, and Age 2012. Statistical Brief #485. Rockville, MD: Agency for Healthcare Research and Quality; 2015.
- Adams K, Corrigan J: Priority Areas for National Action: Transforming Health Care Quality. Washington, D.C.: National Academies Press; 2003.
- Greiner A, Knebel E: Health Professions Education: A Bridge to Quality. Washington, D.C.: National Academies Press; 2003.
- Reeves S, Zwarenstein M, Goldman J, et al.: Interprofessional education: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2008:CD002213.
- Luecht RM, Madsen MK, Taugher MP, Petterson BJ. Assessing professional perceptions: design and validation of an Interdisciplinary Education Perception Scale. J Allied Health. 1990;19(2):181-191.
- McFadyen AK, Maclaren WM, Webster VS. The Interdisciplinary Education Perception Scale (IEPS): An alternative remodelled sub-scale structure and its reliability. J Interprof Care. 2007;21(4):433-443.
- Lie DA, Fung CC, Trial J, Lohenry K. A comparison of two scales for assessing health professional students' attitude toward interprofessional learning. *Med Educ Online*. 2013;18:21885.
- Parsell G, Spalding R, Bligh J. Shared goals, shared learning: evaluation of a multiprofessional course for undergraduate students. *Med Educ.* 1998;32(3):304-311.
- Parsell G, Bligh J. The development of a questionnaire to assess the readiness of health care students for interprofessional learning (RIPLS). Med Educ. 1999;33(2):95-100.
- McFadyen AK, Webster VS, Maclaren WM. The test-retest reliability of a revised version of the Readiness for Interprofessional Learning Scale (RIPLS). J Interprof Care. 2006;20(6):633-639.
- Hyer K, Fairchild S, Abraham I, Mezey M, Fulmer T. Measuring attitudes related to interdisciplinary training: revisiting the Heinemann, Schmitt and Farrell attitudes toward health care teams' scale. J Interprof Care. 2000;14(3):249-258.
- Heinemann GD, Schmitt MH, Farrell MP, Brallier SA. Development of an attitudes toward health care teams scale. Eval Health Prof. 1999;22(1):123-142.

THE END

