

DEVELOPMENT OF INTERPROFESSIONAL TRAINING SCAFFOLDED IN UNDERGRADUATE RESEARCH AND HONORS PROGRAMS; Fred Bertrand (University of Alabama at Birmingham), Midge N Ray (University of Alabama at Birmingham), Pam Paustian (University of Alabama at Birmingham), Brenda M Bertrand (University of Alabama at Birmingham), Donna Slovensky (University of Alabama at Birmingham)

Issue: An interprofessional, team-based approach is necessary for successful delivery of accessible, high quality health care. Patient care aimed at achieving good clinical outcomes and operational efficiencies has become more interprofessional. Developing teamwork skills early in health professions education results in more successful workplace teams. The Biomedical Sciences (BMD) and Health Care Management (HCM) undergraduate majors in the UAB School of Health Professions (SHP) each focus on a distinct arm of health care. The BMD program focuses on the physiology, biochemistry and biology of human disease and treatment, whereas the HCM program focuses on health systems delivery, policy, quality and outcomes. Although the programs provide an expanded pre-professional educational foundation, the development of interprofessional team skills was limited.

Method: To provide BMD and HCM students with interprofessional training early in their education as emerging health professionals, the undergraduate research and honors curricula were revised to provide experiential learning in the health professions.

Outcomes: Our approach employs BMD and HCM interprofessional teams partnering with faculty mentors and community health providers to complete organization-based projects resulting in deliverables that inform solution implementation.

Conclusion: Undergraduate interprofessional learning is achievable scaffolded through experiential undergraduate research and honors projects.

TEACHING BEHAVIORS IN CLINICAL PRECEPTORS: DO THEY MATTER?; Sarah Bradley (Baylor College of Medicine), Joshua Utay (Baylor College of Medicine), Aimee Gardner (Baylor College of Medicine), Ashley Mullen (Baylor College of Medicine)

Issue: Clinical preceptors play a critical role in the education of residents, yet few have formal training on how to be an effective teacher. The aim of this study is to assess how preceptor teaching behaviors impact resident performance. Data from two cohorts (n=38) of orthotics and prosthetics residents was gathered from three points in time during the clinical residency.

Residents evaluated preceptors on the following behaviors: goal setting, using teaching moments, answering questions, mentoring, giving feedback, asking questions, showing respect, allowing participation, responding to feedback, addressing concerns, and overall effectiveness (scale of 1 to 5; 1=significantly below expectations, 5=significantly exceeds expectations).

Resident performance was assessed through self-competency ratings (scale 1 to 5; 1=unable, 5=very able), preceptor-assigned, and rotation grades (0-100).

Results: The ratings of overall effectiveness of the preceptors ranged from 2.33 to 5.00 with a mean of 3.84. The highest mean of overall effectiveness (3.92) occurred during the second data collection point, the only point during which a residents rating of all teaching behaviors except goal setting, using teaching moments, answering questions, and allowing participation correlated with higher self-competency.

Conclusions: Clinical educatorsteaching behaviors have limited impact on resident performance. Training to enhance preceptor performance may result in improved student outcomes.

BUILDING BRIDGES AND CULTURAL COMPETENCE THROUGH A SPORTS MEDICINE OUTREACH PROGRAM IN A DIVERSE URBAN SETTING; Anthony Breitbach (Saint Louis University), Kemba Noel-London (Saint Louis University), Amelia Meigs (Saint Louis University), Demeisha Crawford (Saint Louis University), Jose Mendez (Saint Louis University)

Hypothesis/Issue: An Athletic Training (AT) Program at a private research university in an ethnically and socioeconomically diverse city is committed to ethnically diverse students interested in sports medicine. The AT Program also looks to build cultural competence in its students. Funded by an Ethnic Diversity Enhancement Grant, an AT Club was developed at a diverse urban public high school. The AT Club met at least four times per year over a three years. Students from the university's AT Program also served as student mentors for the club. **Method:** AT club students completed surveys regarding their experience. The surveys asked about their understanding of AT education and their feelings about attending college and a career as an AT. AT student mentors also completed a survey at the end of the experience. They both were also asked to provide comments on their experience.

Observations/Outcomes: Data from the surveys showed significant changes in several of the factors, including knowledge of the profession and their feelings about AT a profession.

Qualitative analysis found positive results in the open ended questions and comments.

Conclusion: This program successfully nurtured interest in Sports Medicine among ethnically diverse students and supported the development of cultural competence among AT students.

EXAMINING THE COMPETENCY OF RECENT GRADUATES OF AN ORTHOTICS AND PROSTHETICS TRAINING; Bronwen Boe (Baylor College of Medicine), Aimee K. Gardner (Baylor College of Medicine)

Introduction: The purpose of this study was to assess perceived competence of graduates of an Orthotic and Prosthetic (O&P) Masters program.

Method: Recent graduates and their supervisors completed a survey adapted from the ABC Practice Analysis, with each group rating graduate ability to independently perform 66 items along the categories of: patient assessment, formulation of treatment plan, implementation of treatment plan, follow up of treatment plan, practice management, and promotion of professional practice on a 1-7 scale (1=unable to perform independently; 7=can independently perform). Supervisors also indicated extent to which graduate competency met expectations. Basic descriptive and independent-sample t-tests were used to analyze data.

Result: Overall competency mean was 5.740.71 for graduates (n=10) and 5.790.40 for supervisors (n=5). Means for each category were similar between groups. Implementation of the Treatment Plan had the most items with significant differences between groups. These differences emerged in tasks related to patient shape capture method and device setup. All supervisors agreed that graduate competency met expectations or was exceptional.

Conclusion: Both graduates and supervisors agree on high levels of competency across all competency areas defined by certification bodies. Potential areas of curriculum improvement are in the Implementation of Treatment Plan.

NURSE PRACTITIONER AND PHYSICIAN ASSISTANT PRECEPTOR CHALLENGES AND BARRIERS: RESULTS OF A NEEDS ASSESSMENT SURVEY; Kathy Cieslak (Mayo Clinic), Robert Adams (Mayo Clinic), Jennifer Bold (Mayo Clinic), Andrew Herber (Mayo Clinic), Brad Karon (Mayo Clinic), Sonja Meiers (Winona State University), Jami Starling

(Winona State University), Claudia Swanton (Mayo Clinic)

Issue/Hypothesis: Increased students enrolling in Nurse Practitioner (NP) and Physician Assistant (PA) training programs has resulted in a shortage of clinical training capacity for NP and PA students. A better understanding of preceptor challenges and barriers is needed to address this shortage.

Method: A preceptor needs assessment survey was disseminated electronically to 1,296 NP and PA providers at a large medical system in the Midwest. The survey was conducted within an academic-practice partnership and contained questions related to preceptor motivation, experience, expectations, preparation, training, resource awareness and barriers to serving as a preceptor. Observations/Outcomes: The response rate was 38%. Respondents preferred a blended format for preceptor education and training (52%). Preceptor themes included: Time management & efficiency, assessment & evaluation, communication & feedback, goal setting & coaching and adult teaching/learning principles. Preceptor barriers included: lack of experience, lack of support, time, preparation, productivity pressures, and unclear expectations.

Conclusion: Educational resources, developed to meet learning styles and preferences of practicing providers, are needed to increase the number and skill set of NP/PA preceptors.

IMPROVING HEALTHCARE PROFESSIONALS - SELF-EFFICACY THROUGH AN INTERPROFESSIONAL CONTINUING EDUCATION PROGRAM ABOUT ALS; Autumn Clegg (UT Health San Antonio), Stephen Morse (ALS Association Texas Chapter), Linda Quiroz (ALS Association Texas Chapter), Carlyne Jackson (UT Health San Antonio), Kim Jones (UT Health San Antonio), Pamela Kittrell (UT Health San Antonio), Karen Martin (UT Health San Antonio), Deborah Myers (UT Health San Antonio), Fernando Ortiz (UT Health San Antonio), Lori Tyler (UT Health San Antonio), Richard Wettstein (UT Health San Antonio)
Hypothesis: Healthcare professionals self-efficacy to work with patients with Amyotrophic Lateral Sclerosis (ALS) will increase after attending an interprofessional continuing education (CE) program about ALS.

Method: This pilot project utilized a pretest/post-test design to examine the change in participants self-efficacy to work with patients diagnosed with ALS. The UT Health San Antonio ALS multidisciplinary clinic team conducted a face-to-face CE program in the Rio Grande Valley on best-practice recommendations for the management of ALS from eight disciplines including neurology, occupational therapy, physical therapy, speech language pathology, respiratory care, social work, dietetics, and nursing.

Outcome: Self-efficacy scores of healthcare professionals increased significantly from a mean of 46.97 to 84.59 ($p < .001$) after attending a one-day interprofessional continuing education program about best practice when working with patients with ALS.

Conclusion: Healthcare professionals working in settings that treat with people with ALS need the opportunity to learn about the standard best-practice recommendations for the management of ALS. Providing a one-day interprofessional CE program in an underserved community resulted in a significant increase in healthcare professional self-efficacy to work with patients with ALS.

RECOGNIZING VICTIMS OF HUMAN TRAFFICKING AND EDUCATING PHYSICIAN ASSISTANTS; Marci Contreras (University of Texas Medical Branch at Galveston)

Hypothesis: Slavery may seem a thing of the past but chances are modern day slavery, or human trafficking, is happening in your own backyard. There are 20 million sexually exploited victims

globally. Evidence suggests human trafficking victims commonly come into contact with a health care provider during their captivity and exploitation, but often these encounters represent missed opportunities for victim assistance.

Methods: A pre-survey was given to 90 PA students to evaluate knowledge of human trafficking. Students participated in a human trafficking lecture and learned victim identification. A post-intervention survey was administered to reassess knowledge.

Outcomes: Of the 90 PA students, 43% respondents agreed being knowledgeable on the subject of human trafficking on the pre-survey, however 90% were much more knowledgeable after the education module. Only 10% felt confident identifying victims prior to the education module, whereas post-survey results revealed an increase to 69%. Only 26% in the pre-survey knew of available victim resources, however 86% were confident to provide resources to potential victims after the education module.

Conclusion: Education on awareness of human trafficking, identifying potential victims, and knowledge of available resources is necessary in PA education.

EXPERIENTIAL LEARNING IN HEALTH PROFESSIONS EDUCATION; Amy Crocker (University of the Incarnate Word), Jennifer Penn (University of the Incarnate Word), Susan N. Smith (University of the Incarnate Word)

Issue: Experiential learning provides students with the opportunity to practice skills and techniques learned in the classroom in a real world setting. These intentionally scheduled experiences enhance didactic content to promote retention and mastery of skills. The ability to control contextual factors and case complexity allows instructors to meet learners needs and course objectives. Early integration of experiential learning within health professions curricula may assist with student preparation for clinical placements and increase student confidence.

Opportunities can be created for students to encounter high risk scenarios without the fear of causing harm, and special populations that students may not otherwise encounter.

Method: At the University of the Incarnate Word School of Physical Therapy, experiential learning has been intentionally integrated into the curriculum. Activities have included simulation, integrated clinical experiences, service learning, and community patient resource groups.

Observations: Through intentional reflection students consistently state that experiences were meaningful, provided context for learning, and promoted increased mastery of skills and techniques learned in the classroom.

Conclusion: Experiential learning can be a powerful tool in health professions education. It can facilitate skill acquisition and promote improved clinical reasoning. Health professions education programs should consider integration of experiential learning.

EFFECTIVENESS OF AN INTRODUCTORY INTERPROFESSIONAL COURSE IN BUILDING READINESS FOR COLLABORATION IN HEALTH PROFESSIONS

STUDENTS; Kathrin Eliot (Saint Louis University), Anthony Breitbach (Saint Louis University), Leslie Hinyard (Saint Louis University), Eileen Toomey (Saint Louis University)

Hypothesis: Interprofessional education (IPE) research has recommended learning experiences early in the professional preparation of students in the health professions to introduce the skills required for collaborative-ready health care professionals. IPE 1100: Introduction to Interprofessional Health Care, a course developed for first year students from 10 professions,

features innovative pedagogy intentionally designed lay the foundation and effectively build readiness for collaboration in health professions students.

Method: The Self-Assessed Collaboration Skills (SACS) Instrument, which measures students perceptions of their skills in collaboration along the dimensions of information sharing, team support and learning, was administered to students in IPE 1100 at the beginning (pre-test) and end of the semester (post-test).

Observations/Outcomes: 176 of 270 (65.2%) of the students in IPE 1100 in spring semester 2017 fully completed both the pre and post SACS instrument. Paired-samples t-tests showed significant ($p < .001$) improvement in overall collaboration skills as well as within each dimension (information sharing, team support, and learning).

Conclusion: These results show that a course with pedagogy intentionally designed to build readiness for early IPE learners can increase self-assessed skills in collaboration and teamwork, improve appreciation for person-centered collaborative care and prepare students to engage in upper level IPE and professional coursework.

PERCEPTION OF PREPAREDNESS FOR PA CLINICAL ROTATIONS: STUDENT AND PRECEPTOR ASSESSMENT; Evelyn Graeff (MCPHS University), Nancy Hurwitz (MCPHS University)

Hypothesis/Issue to be addressed: Preparing Physician Assistant (PA) students for clinical rotations is an important assessment for programs nationwide. The focus of this study is to assess preceptor perception of PA student preparedness for clinical rotations and student perception of their own preparedness for clinical rotations.

Method: A cross sectional study was done using a web-based survey sent to PA preceptors and PA students currently enrolled in US PA programs. Outcomes: PA students (n=81) indicated they were either well prepared (45.7%) or adequately prepared (42%). PA students felt history taking was their strongest attribute (46.9%), while preceptors (n=137) indicated that professionalism (33.6%) was the strongest attribute. Students (66.7%) and preceptors (68.6%) indicated that primary care is the area of medicine PA students are best prepared for. The area in need of most improvement is creating a differential diagnosis, indicated by both preceptors (46%) and students (44.4%).

Conclusion: It is important to assess the preparedness of PA students for clinical rotations. Identifying areas of strengths and weaknesses as perceived by both the preceptors and the students can help PA programs gain insight into areas that need to be improved in the curriculum.

NURSE PRACTITIONER AND PHYSICIAN ASSISTANT SIMULATION EDUCATION ON SEPSIS USING IN-SITU TRAINING; Sally Heusinkvelt (Mayo Clinic), Gina Kesselring (Mayo Clinic), Katherine Pearson (Mayo Clinic)

Hypothesis: Can in-situ simulation for Nurse Practitioners and Physician Assistants (NPPAs) be incorporated into daily practice on a busy hospital service?

Methods: Study evaluated a 45 minute in situ simulation training session for NPPAs on sepsis, in an inpatient hospital setting, using mixed methods of both quantitative and qualitative information. Outcomes: Learner feedback demonstrated the short, hands on, learning experience in situ provided was enjoyed and beneficial. Debriefing following the scenario provided learners with immediate feedback on his/her performance. Learners expressed ability to apply updates to clinical treatment to future patient care.

Conclusions: In situ simulation should continue to be offered to NPPA's in the inpatient setting due to the benefit of real time learning in a cost effective manner. When performing in situ simulation, patient census and provider capacity should be considered to ensure learner receptivity and a safe patient ratio can be maintained. The amount of time it takes the learner to complete the training is important to consider when designing an in situ platform.

BUILDING RELATIONSHIPS ACROSS DISCIPLINES: WORKING TOGETHER TO IMPROVE DISCHARGE PLANNING FOR PATIENTS; Jessica Hill (University of Cincinnati), Denise K. Gormley (University of Cincinnati) Jessica Hill (University of Cincinnati) Jahmeel Israel (University of Cincinnati) Tracy Pritchard (University of Cincinnati) Myrna Little (University of Cincinnati) Amy J. Costanzo (University of Cincinnati Medical Center) Jane Goetz (University of Cincinnati Medical Center) Katherine Staubach (University of Cincinnati Medical Center)

Hypothesis: The literature supports coordinated care through interprofessional collaborative practice (IPCP) enhances communication for teams and improves care quality and health outcomes for patients. The University of Cincinnati College of Nursing received a HRSA funded Nurse Education, Practice, Quality and Retention grant collaborating with the University of Cincinnati Medical Center to develop interprofessional practice through nurse-led bedside rounds.

Method: This nurse-led practice model developed an interprofessional team that includes nursing, medicine, social work, dietary, pharmacy, and rehab services on a surgical acute care floor. IPCP team meets daily at the same time in patient rooms to report on updates from the previous 24 hours, anticipate needs, identify goals for discharge, and hear patient concerns.

Outcomes: Patient experience scores increased, specifically related to communication around discharge planning, as measured by Hospital Consumer Assessment of Healthcare Providers and Systems. Findings demonstrated significant improvement in patient experience over one year post-implementation of nurse-led interprofessional bedside rounds as compared to the previous year. The HCAHPS discharge information domain increased from the 80th University Health Consortium (UHC) percentile to the 99th UHC percentile between 2015-2016.

Conclusion: Structured daily interprofessional rounding presents an opportunity to enhance IPCP team communication strategies for patient care and discharge planning.

INTERPRETING DYNAMICAL ASPECTS OF MOVEMENT VARIABILITY: IMPLICATIONS FOR REHABILITATION PROVIDERS; John Hollman (Mayo Clinic College of Medicine and Science)

Examining nonlinear properties of movement variability (complexity, fractals) is emerging as a more informative analysis of walking capacity than examining traditional linear measurements (walking speed). Healthy participants (n=20) and those with Parkinsons disease (n=6) or hemiparesis following stroke or chronic inflammatory demyelinating polyradiculoneuropathy (n=14) completed 6-minute walk tests. Spatiotemporal gait parameters were measured with inertial measurement units. Linear measures (walking speed) and nonlinear estimates of complexity and fractal dynamics in stride time variability were compared between overground walking, treadmill walking and in those with hemiparesis, walking with an ankle-foot orthosis (AFO). On a treadmill, complexity and fractal exponents decreased in healthy participants but were unchanged in Parkinson's participants. In hemiparetic participants, changes in complexity and fractal dynamics were much greater than changes in walking speed when walking with

AFOs. Given the emerging evidence on assessing movement variability through nonlinear analyses, rehabilitation providers should be aware of how these analyses may inform clinical decisions. Based on our findings, treadmills alter gait properties in healthy individuals but may benefit those with Parkinson's disease. In hemiparesis, compensating for strength deficits with AFOs produces more readily apparent changes in complexity and fractal dynamics than walking speed.

IMPACT OF A CASE-BASED INTERPROFESSIONAL EDUCATION EXPERIENCE BETWEEN PHYSICAL THERAPY AND MEDICAL STUDENTS; Dave Krause (Mayo Clinic), John Hollman (Mayo Clinic), Karen Newcomer (Mayo Clinic), Terin Sytsma (Mayo Clinic)

Purpose: With the goal of fostering collaboration, healthcare educational programs are incorporating interprofessional education (IPE) into their curriculums. The purpose of this study was to examine changes in readiness for IPE of physical therapy and medical students before and after a case-based IPE experience.

Methods: PT and MD students participated in a half-day session to discuss the management of clinical cases. Students were surveyed using the Readiness for Interprofessional Learning Scale (RIPLS) prior to the IPE session and immediately after the interaction.

Results: Twenty-seven PT students and twelve MD students completed both pre and post IPE surveys for analysis. There was a statistically significant group x time interaction on the total RIPLS scores ($F_{1,36} = 5.662, p = .023$). Analysis of the subscale scores indicated changes in the "Teamwork & Collaboration" scores contributed most to increase in RIPLS scores.

Conclusions: Based on our findings, the case based IPE session resulted in a positive change in readiness for IPE in the PT students whereas the MD students' readiness scores remained relatively constant. **Clinical Relevance:** A case-based workshop where PT and MD students work together on clinical cases appears to be an effective method of providing meaningful IPE fostering teamwork and collaboration.

PROMOTING COMMUNICATION AND QUALITY OF CARE THROUGH INTERPROFESSIONAL SIMULATION; Courtney Lewis (Eastern Michigan University)

Issue to be addressed: The Institute of Medicine (2010) and the World Health Organization (2014) have both outlined interdisciplinary education as a priority in health care. This has created the need for interprofessional education (IPE) for future healthcare providers. This study examines the questions: (1) Did students knowledge of professional roles increase following an interprofessional simulation experience? (2) Were students more satisfied and confident in their communication with other disciplines following an interprofessional simulation experience?

Method: This study was done twice in a two-year time period. Participants included two students from six different disciplines at Eastern Michigan University initially (n=12) with the addition of two disciplines the second time (n=16). Disciplines included nursing, physician assistant, social work, athletic training, orthotics and prosthetics, dietetics, speech language and pathology and clinical laboratory science.

Observations: Data will be analyzed using SPSS software. Student satisfaction and perceived confidence in interprofessional communication will also be analyzed.

Conclusion: Preliminary results will show that students knowledge of the professional roles of other disciplines increased. Also, their confidence in speaking to other professionals improved

after the simulation. These results will provide a framework for larger IPE simulations, which can improve communication and comfort in interacting with others.

INTERPROFESSIONAL EDUCATION IN HEALTHCARE: USING EXERCISE SCIENCE TO IMPROVE SPEECH COMMUNICATION; Ciara Leydon (Sacred Heart University), Valerie Wherley (Sacred Heart University), Kelsey Foster (Sacred Heart University), Maria Samara (Sacred Heart University)

Issue: Interprofessional education (IPE) is used increasingly in academic programs to engage students in interactive learning to improve collaboration, and service delivery. Feasibility of engaging exercise science (ES) and speech-language pathology (SLP) students in IPE was assessed during implementation of a yoga program designed to advance purposeful movement and communication skills for adolescents with Autism Spectrum Disorder. Curricular goals for ES and SLP students were established to advance three IPE core competencies: interprofessional communication; roles and responsibilities; and values.

Methods: Twelve (eight graduate SLP; four undergraduate ES) students completed the IPE curriculum consisting of implementation of a yoga program, participation in seminars, and community education, over two semesters. IPE competencies were assessed via questionnaires administered before and after program completion. Responses were analyzed quantitatively, and quantitatively using theme and code processing, completed using Bloom's Taxonomy.

Results: ES and SLP student interprofessional communication improved as evidenced by a 56% increase in accuracy defining profession-specific vocabulary. Knowledge of professional roles, responsibilities, and values, improved as demonstrated by shifts in response trends from "knowledge" (pretest) to "synthesis and comprehension" (posttest).

Conclusion: Students acquired IPE competencies while meeting profession-specific program standards.

INTERPROFESSIONAL EDUCATION THROUGH A MONTHLY STROKE SUPPORT GROUP; Jill Mayer (Ithaca College), Sarah Fishel (Ithaca College), Jessica Valdez Taves (Ithaca College), Yvonne Rogalski (Ithaca College), Janice Elich Monroe (Ithaca College), Laura Gras (Ithaca College)

Hypothesis/Issue to be addressed: To investigate the impact of participation in an interprofessional stroke support group on students' knowledge of other allied health professions and the rehabilitation process.

Method: A monthly stroke support group was developed by faculty from occupational therapy, physical therapy, speech-language pathology, and therapeutic recreation. Each semester, 2 students from each discipline participated in the group. The students' self-reported knowledge of stroke, the rehabilitation process, and the role of each profession was examined before and after participation using a mixed-methods methodology. Quantitative data analysis was performed using a Wilcoxon signed-rank test and qualitative data analysis was analyzed by identifying themes using Atlas.ti.

Observations/Outcomes: Sixteen students participated in the program. After participation, the students reported greater knowledge of neurologic conditions ($p=.001$), the rehabilitation process ($p=.002$), and the role of the other professions ($p=.001$). Themes from qualitative analysis included an appreciation of the diversity of stroke presentation, the importance of listening to patients goals, and the overlapping but differential roles of the rehabilitation team.

Conclusion: Interprofessional collaboration through a stroke support group is an educational experience that may be used to improve preparation of allied health professionals for rehabilitation settings.

FACULTY INTERPROFESSIONAL COLLABORATION ENHANCES CLINICAL EDUCATION PROGRAM; Jean McCaffery (Springfield College), Carey Leckie (Springfield College), Kimberly Nowakowski (Springfield College), Deborah Pelletier (Springfield College)

Hypothesis: Interprofessional collaboration of OT and PT clinical education faculty at one institution will enhance each programs effectiveness, and the consistent approach to student management will be valuable to the partnership between academia and clinical sites.

Method: OT and PT clinical education faculty at one academic institution worked collaboratively, both formally and informally, to achieve greater consistency and effectiveness in management of clinical education. Collaboration included sharing of program policies, strategizing approaches to legal issues, and addressing student management surrounding accountability, responsibility, and affective behavior.

Observations/Outcomes: Collaboration appears beneficial based on communication from all stakeholders. The academic institution has experienced increased numbers of clinical education placements across disciplines. Efficiency and quality of communication has enhanced partnerships between academic programs and clinical sites. Consistent management of student issues has improved across programs.

Conclusion: With the challenges of clinical education in today's healthcare environment, maximizing resources, developing consistent approaches to management of students, and maximizing support within the institution and the community is vital. This interprofessional approach has enhanced effectiveness and efficiency of each program, and maximized support for students and clinical education sites.

SELF-REPORTED PATIENT ENCOUNTERS: DOES VOLUME, DURATION, AND LEVEL OF PARTICIPATION IMPACT SUCCESS IN RESIDENCY?; Mariah Melvin (Baylor College of Medicine), Aimee Gardner (Baylor College of Medicine), Ashley (Baylor College of Medicine)

Introduction: The value of a clinical education is often assessed through quantity and quality of patient encounters. The goal of this study was to determine if an increased number of patient case logs, time spent with patient, and a higher level of resident involvement results in improved self-competency, clinical course grades, and preceptor ratings of resident performance.

Methods: Two cohorts of orthotics-prosthetics residents logged patient encounters (total encounters, average time with patient, level of resident involvement) and self-competency (77-items; 1=not at all able, 5=very able) at 3 points during an 18-month residency. Rotation performance (0-100, 100=highest) was ascertained with preceptor ratings and test scores. Means and correlations were derived using SPSS. Results: Data from two graduated cohorts of residents (n=38) was examined. The number of cases logged and time spent with patients did not significantly impact overall self-competency, preceptor ratings or clinical course grades. Two time periods indicated that resident level of involvement, specifically performance of prosthetic procedures, positively impacted overall self-competency ($p<0.05$).

Conclusions: Increasing the amount of total cases logged by a resident may not result in improved resident performance. Some aspects of patient encounters, such as level of resident involvement in patient care, may affect self-competency.

THE INTERPROFESSIONAL ACADEMY OF EDUCATORS: INCLUSIVE, COLLABORATIVE, INNOVATIVE; Kimberly Michael (University of Nebraska Medical Center), Tanya Custer (University of Nebraska Medical Center)

Hypothesis/Issue to be addressed: To elevate the educational mission of the Institution, the University of Nebraska Medical Center established the Interprofessional Academy of Educators in 2016. Designed by educators for educators, this interprofessional community strives to improve health professions education by encouraging curricular innovation, supporting educational scholarship, and offering mentorship for early career and seasoned educators.

Method: The inaugural class included a unique blend of medical scholars from eight Colleges, two Institutes, Academic Affairs, IT Services, and Library Sciences. Members span a 500-mile wide campus. Eight Special Interest Groups (SIGs) foster interprofessional collaboration and scholarship. An academically diverse leadership team of five oversees the Academy.

Observation/Outcomes: The SIGs drive educational projects. Each Interest Group has a specific focus with like-minded members determining and accomplishing desired goals. In-progress projects include a peer-evaluation rubric for clinical teaching, a campus-wide technology inventory with recommended best practices, a Wellness Conference to recognize rural Clinical Preceptors, and a Premiere Education Banquet centered on critical thinking.

Conclusion: The Interprofessional Academy of Educators is connecting scholars across the campus. A reflection on the first year finds advancement of educational projects, more opportunities for innovation, and improved collaboration for education.

WHAT CLINICAL ROTATION FACTORS IMPACT RESIDENTS SUCCESS? AN EXAMINATION OF AUTONOMY, PATIENT INTERACTIONS, AND LEARNING OBJECTIVES; Maxx Miller (Baylor College of Medicine), Ashley Mullen (Baylor College of Medicine), Aimee Gardner (Baylor College of Medicine)

Educators and trainees both recognize that autonomy, amount of patient interactions, and setting learning objectives are vital for a successful residency. This study examined if these clinical rotation characteristics impact resident success. Two cohorts of orthotics-prosthetics residents rated rotation characteristics (autonomy, patient interactions, learning objectives; 1=significantly below expectations, 5=exceeds expectations) and self-competency (77-items; 1=not at all able, 5=very able) at 3 points during an 18-month residency. Rotation performance (0-100, 100=highest) was ascertained with preceptor ratings and test scores. Means and correlations were derived using SPSS. Data from thirty-eight residents was examined. Mean self-competency and rotation performances improved from time 1 to time 3 ($4.14 \pm 0.43 - 4.36 \pm 0.38$ $p < 0.01$, $90.74 \pm 5.15 - 92.62 \pm 4.55$ $p < 0.05$, respectively). Autonomy predicted performance at time 1 ($p < 0.05$) only and did not predict self-competency at any point. Neither amount of patient interactions nor presence of learning objectives predicted performance or self-competency at any point. These data show that over time, residents are becoming more competent as rated by both themselves and their preceptors. These data do not suggest that the amount of patient interactions and presence of learning objectives impact resident competencies. Autonomy may play the largest role in the beginning residency as students make the transition to clinical practice.

BRINGING BACCALAUREATE HEALTH SCIENCE AND NURSING STUDENTS TOGETHER FOR ORAL HEALTH IPE IN SIMULATION LAB; Christina Murphey (Texas A&M University Corpus Christ), Sherdean Owens (Texas A&M University Corpus Christ)

Introduction: Allied health professionals are important for meeting the growing demands of the complex process of oral health care healthcare, access and service delivery. Historically, many baccalaureate allied health science students (HLSC) do not participate in IPE and simulated learning activities. Therefore, understanding the role of the allied health professional and participating in shared experiences are important aspects of IPE so that nurses and allied health professionals can contribute to team-based care.

Issue to be addressed: (1) bring together baccalaureate nursing and HLSC students through a shared core set of oral health competencies and standardized simulation experiences, and (2) develop acute care and community simulation resources for use in IPE between nursing and HLSC programs.

Methods: Our oral-health IPE clinical simulation teaching innovation was guided by the Griffith University Framework of Interprofessional Education (GUFIFE). The Smiles for Life Interprofessional Comprehensive Oral Health Curriculum were used as anchor content and woven into specified nursing and HLSC courses and activities. Senior nursing and HLSC students came together for standardized patient experiences related to oral health assessment and intervention, patient education, discharge planning in acute care and community simulated experiences at the simulation laboratory, and public dental health referrals.

Intended Outcomes: Development of an oral-health IPE simulation tool.

APHASIA AWARENESS AND COMMUNICATION CONFIDENCE AT ITHACA COLLEGE: A COMPARISON BETWEEN HSHP AND NON-HSHP SCHOOLS; Madison O'Brien (Ithaca College), Yvonne Rogalski (Ithaca College)

Hypothesis/Issue to be addressed: Aphasia is an acquired language disorder that impacts communication. We explored aphasia awareness at Ithaca College and the confidence levels of students communicating with people who have aphasia by comparing School of Health Sciences and Human Performances (HSHP) students to non-HSHP students.

Method: A Qualtrics survey was distributed to the Ithaca College student body electronically. Students were asked if they had heard of aphasia and, if so, how they gained that awareness. To address confidence levels, five transcripts of people with various types of aphasia were presented. For each transcript, students were asked to rate their confidence in working with that person on a scale of Not Confident (1) - Very Confident (5).

Observations/Outcomes: The survey was completed by a total of 344 students. Overall, HSHP students reported greater aphasia awareness (87% vs. 56% of non-HSHP students) and greater confidence in communicating with PWA (36% vs. 15%) compared to non-HSHP students.

Additionally, a higher number of HSHP students indicated that they received education about aphasia (68%) compared to non-HSHP students (41%).

Conclusion: The results of the study indicate that awareness and education about aphasia may result in greater confidence levels when communicating with people with aphasia.

STUDENT EXPERIENCES WHEN TREATING PATIENTS WHO SPEAK SPANISH: A THREE YEAR STUDY; Suzanna Okere (Texas State University), Steve Spivey (Texas State University)

Hypothesis/Issue to be addressed: Student physical therapists (PTs) often treat patients who only speak Spanish. Language barriers may contribute to health disparities. This investigation documented: (1) how often student PTs treat patients who speak Spanish (2) students' ability to

communicate using medical Spanish (3) the impact of students' Spanish language skills on their learning experience and the quality of patient care.

Methods: A survey was administered to 3rd year student PTs. It included questions about frequency of treating patients who speak Spanish, ability to communicate in Spanish, and experiences when treating patients who speak Spanish. Descriptive statistical analyses were performed.

Observations/Outcomes: Third year PT students (n=110), including 51 males and 57 females (2 no response), participated. The average age was 28.0 years (SD: 3.7). 57% treated patients who speak Spanish once a week or more often, however 78% indicated they have little/no ability to communicate using medical Spanish. 41% indicated their Spanish speaking skills diminished the quality of patient care. Participants stated their medical Spanish diminished (13.6%) their own learning experience.

Conclusions: It is extremely common for student PTs to treat patients who only speak Spanish. However, students have limited ability to communicate using medical Spanish.

CONFIDENCE LEVELS OF FUTURE HEALTH PROFESSIONALS COMMUNICATING WITH PEOPLE WITH APHASIA (PWA); Kristen Pompey (Ithaca College), Yvonne Rogalski (Ithaca College)

Hypothesis/ Issue to be addressed: Aphasia is an acquired language disorder. Health professionals from different disciplines work with people with aphasia (PWA). We surveyed Ithaca College Occupational Therapy (OT), Physical Therapy (PT), and Speech-Language Pathology (SLP) students to assess their basic knowledge of aphasia and to rate how confident these future health professionals would be communicating with PWA. Method: Students completed anonymous electronic or paper surveys on their knowledge of aphasia and rated how confident they would be working with PWA based on five PWA's conversational speech transcripts (1 = Not Confident, 5 = Very Confident).

Observations/Outcomes: Significant differences between student confidence ratings were found. SLP students had the highest confidence levels (M = 3.17), which were significantly higher than OT but not PT students ratings. Few students, however, felt confident (rating of 4) or very confident (rating of 5) about communicating with PWA.

Conclusion: Preliminary results indicate that even though SLP students had the highest confidence ratings in communicating with PWA, few students felt confident or very confident about communicating with PWA. One way to increase the confidence levels of future health professionals would be to provide more opportunities for direct interaction with PWA.

ISSUES AND PERCEPTIONS OF MALES IN A PREDOMINANTLY FEMALE DOMINANT ALLIED HEALTH PROFESSION: A SURVEY; Martin Rice (Indiana Wesleyan University), Angelo J. M. Maxim (The University of Toledo)

Hypothesis/Issue to be addressed: While allied health professions espouse the importance of being all inclusive and non-discriminatory for those populations served, there is a tendency for many allied health professions to reflect a female gender bias with regard to its practitioners. Occupational therapy is no exception to this bias. As such, this study investigated perceptions of having male practitioners in the occupational therapy profession.

Method: In this exploratory study, a 48-item questionnaire was emailed to nearly 9,500 licensed occupational therapists and occupational therapy assistants in the state of Ohio with a response rate of 7.7%. There were approximately 5 female respondents for every one male respondent.

Observations/Outcomes: While some agreement occurred on a number of items, male and female respondents differed in the area of personal finance and patient education. Open ended questions yielded some gender specific stereotypes, particularly in response to patient treatment. However, both genders reported having high job satisfaction, a perception of contributing to society, and job security regardless of gender.

Conclusion: While this study focused on occupational therapy, it is possible that similar gender-specific perceptions exist with other health professions and is an area needing further research as well as its impact upon health care delivery.

DESIGNING INTERPROFESSIONAL PEDIATRIC EDUCATION EXPERIENCES IN ALLIED HEALTH; Dawn Roberts (Springfield College), Elizabeth McAnulty (Springfield College), Ellen Rainville (Western New England University)

Issue addressed: Clinical practice in pediatric occupational and physical therapy is interprofessional in nature. Current pediatric curricular structure often does not include training in interprofessional pediatric practice. We designed interprofessional learning experiences (IPE) in pediatrics and assessed feedback from students and faculty.

Method: We designed clinically based IPE that would have relevance and meaning if taught to OT or PT students, but were enhanced by being taught to OT and PT students together. The collaborative interprofessional education experiences first modeled IPE (Interprofessional Conference), then allow students to participate in interprofessional activities (Labs and Case Studies), then allowed students to reflect on IPE (reflective assignments). Data was gathered through analysis of reflective writing, focus groups, student course evaluations, and faculty feedback.

Observations: Obstacles to IPE included scheduling challenges, administrative financial support, and significant faculty prep time. Students had only a novice understanding of other professions. The real issues that students reported were not specific to working with other disciplines but struggling with knowing how to work with other people and personalities.

Conclusion: Students' experiences with and responses to these pediatric interprofessional collaborations were somewhat superficial. Challenges students reported were like what has been found in the literature.

INTERPROFESSIONAL EDUCATION IN GRADUATE HEALTH PROGRAMS LL STUDENTS - ATTITUDES AND PERCEPTIONS; Jitendra Singh (A.T. Still University), Helen Salisbury (A.T. Still University)

Background/Issue: Research on interprofessional learning and education has primarily focused on undergraduate programs, intervention-based programs (pre- and post-test), and clinical programs. Efforts should also be made to examine attitudes of graduate students who are enrolled in health programs.

Purpose and Method: The purpose of this quantitative descriptive cross sectional study was to explore attitudes of graduate healthcare students towards interprofessional learning and to examine differences in these attitudes and perceptions among healthcare graduate students from differing university health programs.

Outcomes: 296 graduate students from 8 different programs participated in this study. Of the total respondents, most (47.6%) were enrolled in Doctor of Health Science (DHSC) program and the majority (55.5%) worked in health care settings. Findings suggested that students in different health programs considered team-work and collaboration important to function in healthcare.

Graduate students felt that focus on interprofessional learning led to improvement in communication and problem solving abilities.

Conclusion: Implementation of interprofessional learning curricula may enhance understanding of the work of other health professionals which could result in better patient care. These findings could help educational institutions as they advance towards implementing interprofessional educational curricula.

ASSESSMENT OF COLLEGE STUDENTS' FOOD INSECURITY AT A UNIVERSITY REGIONAL CAMPUS; John Snyder (The Ohio State University)

Issue to be addressed: Access to affordable, healthy food is critical to a culture of health. Food insecurity, a limited or uncertain availability of nutritionally adequate and safe foods, has been associated with lower academic performance, decreased psychosocial function, and poor health. College students, faced with rising higher education costs, may experience difficult decisions about paying tuition and fees versus purchasing food. Previous studies have reported that 45-72% of college students experience food insecurity. The purpose of this study was to determine the prevalence of food insecurity among students at Ohio State Lima and to identify correlates of food insecurity among these students.

Methods: The study was conducted as a cross-sectional, nonprobability, written survey using a sample of convenience. The survey consisted of 20 items, including 6 standardized questions to determine food insecurity and 14 variables that may correlate with food insecurity.

Observations/Outcomes: A total of 102 responses were received, 10.5% of the population.

Analysis revealed that 61.8% of students were food insecure. Correlation analysis and multivariate binary logistic regression models revealed three variables correlated with food insecurity: (1) self-reported rating of health; (2) place of living; and (3) credit card debt.

Conclusions: This study led to the establishment of a campus food pantry for college students to promote a culture of health.

THE ONE HEALTH INITIATIVE: AN INTERDISCIPLINARY EDUCATION MODEL FROM A VETERINARY MEDICINE PERSPECTIVE; Robin Sturtz (LIU-Post)

Issue to be addressed: This presentation will apply One Health perspectives to allied health studies. The One Health Initiative was specifically designed to engender collaborative efforts within the health professions for the benefit of people and animals.

Method: As part of developing a curriculum in veterinary technology, we put together interdisciplinary study topics and activities regarding zoonoses, antibiotic resistance, and environmental change. We suggest lecture topics, hands-on projects, and multi-disciplinary seminars to help focus attention on these issues. In addition, a review of recent One Health "hot topics" will be offered.

Observations: Benefits from this enhanced perspective apply to pre-medical, biomedical science, clinical laboratory science, nursing, physical therapy, biology and public health, as well as veterinary technology and pre-veterinary medicine, students. A human or animal disease may have an animal vector, increasing from epidemic to pandemic because of environmental change, and present challenges including vaccination availability and antibiotic shortages. Managing these factors can involve contributions from all of our disciplines.

Conclusion: In addition to serving an important public health role, the One Health concept is a rich area of study and discussion for the allied health professions. Sample projects and topics of

interest are available to strengthen our goal of interdisciplinary learning and collegial sharing of information.

GADOLINIUM CONTRAST SAFETY FOR PATIENTS AT-RISK OF DEVELOPING NSF IN MR IMAGING: A REVIEW OF THE LITERATURE; Asher Street (UMMC), Kristi Moore (UMMC), Kala Ford (UMMC), Savannah Gillis (UMMC), Alexa Graham (UMMC), Tyler Gray (UMMC), Anne Howard Steinwinder (UMMC)

Hypothesis: To examine the background and risks of the use of gadolinium contrast media in MR imaging and explore strategies to reduce the likeliness of adverse effects in patients who may be at-risk for developing NSF.

Method: Three scholarly research databases were searched to identify articles that discuss adverse reactions to gadolinium contrast, specifically relating to kidney function, in MR examinations.

Literature Review: Safety of contrast media is related to the stability of the chelate bond, which varies by manufacturer. Patients with decreased kidney function or chronic kidney disease have a higher risk of an adverse reaction to gadolinium contrast; therefore, macrocyclic contrast agents are considered safer.

Outcomes: Scans for patients at risk for developing NSF should be carefully evaluated prior to the examination. The risks versus benefits of the scan should be analyzed with the aid of the referring physician and radiologist. In conjunction with the GFR guidelines defined by the ACR for contrast administration, the recommended dosages for gadolinium should be carefully followed for all patients.

Conclusion: While there are advantages to contrast use in MR exams, technologists should work closely with referring physicians and radiologists in order to minimize risks to patients with decreased kidney function.

DOES UTILIZING LABORATORY BASED PATIENT SCENARIOS IN A PHYSICAL THERAPIST ASSISTANT (PTA) NEUROLOGY CLASS IMPROVE THE STUDENTSPERCEPTIONS OF EVIDENCE-BASED PRACTICE (EBP): A CASE REPORT; Shari Tanner (Orangeburg-Calhoun Technical College)

Issue to be addressed: The purpose of this case report is to investigate PTA students perceptions of EBP after utilizing laboratory based patient scenarios.

Method: Fourteen PTA students completed a survey regarding their perceptions of EBP prior to receiving their initial lecture in EBP and again upon completion of the four lab sessions.

Outcomes: Means of the pre-survey results, post-survey results, as well as percent change were analyzed. All questions showed a positive change in perception of EBP and improved grade averages were noted from start to finish of the project.

Conclusion: Utilization of laboratory scenarios in a PTA neurology course improved the studentsperceptions of EBP in all categories surveyed. Data suggested this activity improved the students abilities to practice EBP on model patients within the laboratory setting. These data strongly suggest that this type of activity has a very positive effect on PTA students in EBP perception.

OCCUPATIONAL CHRONIC LOW DOSE RADIATION EFFECT: LIFE STYLE INFLUENCES; James Temme (University of Nebraska Medical Center), Jman Ahmad (University of Nebraska Medical Center)

Radiation induced oxidative stress on x-ray workers can be modified by changing daily life style habits. In this exhibit a review of the effect of changing life style, such as cigarette smoke and dietary manipulations on radiation-induced oxidative stress on x-ray workers has been discussed. Three research articles were selected for review. A study by Klucinski et al., 2008 showed that a significant decrease of antioxidants GPx, SOD and CAT activity in x-ray groups as compared to controls was observed. A second study by Kayan, et al., 2009 showed significant increase in blood LP level in the smoker and nonsmoker x-ray group compared to age-matched controls. Moreover, they showed that treatment with antioxidant vitamin C and E significantly lowered LP levels, while increases GSH and GPx levels as compared to non-treated x-ray group. In the third study, Zeraatpishe et al., 2011 showed that oral administration of lemon balm infusion in x-ray groups resulted in significant improvement in antioxidant enzymes level and marked reduction in LP. The results of the review in the exhibit can be used to address a major awareness for improving occupational radiation protection.

NUTRITION AND MUSCULOSKELETAL PAIN: THE EFFECT OF A PLANT-BASED DIET ON FUNCTIONAL STATUS; Pamela Towery (Arkansas State University), James Guffey (Arkansas State University); Cody Doerflein (Arkansas State University); Kyle Stroup (Arkansas State University)

Chronic musculoskeletal pain, which can be debilitating, affects all genders, ethnicities, and age groups. Research has linked consumption of a plant-based diet to improved status of persons with chronic pain. A diet rich in fruits, vegetables and whole grains, known for anti-inflammatory properties, reduces chronic pain and disability associated with conditions such as arthritis, diabetes, and obesity. The purpose of this study was to examine the value of a plant-based diet in the management of musculoskeletal pain and functional limitations. The investigation provided a model of interprofessional collaboration between Physical Therapy and Nutritional Science. Ten subjects participated in the eight-week study. The research team conducted a baseline evaluation, which included anthropometric data and two self-reported outcome measurements using the Numeric Pain Rating Scale and the Standard Form-36. A registered dietitian provided a sample menu cycle and education on a plant-based diet. Subjects utilized a phone app to log food intake and receive support from the dietitian. Post data collection included the addition of PatientsGlobal Impression of Change Scale. Statistical analysis revealed significant improvement in all outcome measures including body mass index. Consumption of a plant-based diet improved chronic pain and functional limitations.

CULTURAL PERCEPTIONS OF PHYSICAL THERAPY STUDENTS IN THE 21ST CENTURY; Michaelle Unterberg (Maryville University), Olaide Sangoseni (Maryville University)

Hypothesis: To evaluate the cultural awareness/sensitivity of physical therapy students in a didactic curriculum purposed to increase cultural competence.

Hypothesis: sixth year students will demonstrate higher levels than first and third year students.

Method: A survey to assess cultural awareness among three groups of students enrolled in a 6.5-year program using the Multicultural Sensitivity Scale. Item response total score was computed. The total score was the sum of the MSS items with higher score indicative of higher level of cultural awareness or sensitivity.

Outcomes: Participants were students in first (dpt1, n=36), third (dpt3, n=36), and sixth (dpt6, n=28) year of the Doctor of Physical Therapy program. Mean and median MSS score: dpt1 =

55.0, 55.99+12.9(n=36), dpt3 = 57.0, 55.0+10.0 (n=36), dpt6 =61.5, 60.5+9.1 (n=28). Analysis of mean and median scores indicated a significant difference between dpt6 and the other groups, $p < .05$, 95% CI. No significant difference was found between dpt1 and dpt3 scores.

Conclusion: Physical therapy students who have completed the cultural competency curriculum and clinical experiences demonstrated high cultural sensitivity/awareness. Students who have completed multiple clinicals were able to synthesize the theoretical principles with patient interaction and demonstrate greater cultural sensitivity than students who have not had clinicals.

LAUNCHING AN INTER-INSTITUTIONAL INTERPROFESSIONAL EDUCATION PROGRAM; Madalynn Wendland (Cleveland State University), Kelle DeBoth (Cleveland State University), Violet Cox (Cleveland State University), Joanna DeMarco (Cleveland State University), Vida Lock (Cleveland State University), Elizabeth Domholdt (Cleveland State University)

Issue: Providing robust interprofessional education (IPE) at institutions not affiliated with academic health centers requires creative inter-institutional work.

Method: Cleveland State University (CSU), an urban doctoral university, is engaged in IPE activities with Northeast Ohio Medical University (NEOMED), a rural special focus medical school. CSU health-related programs include physical therapy, occupational therapy, speech language pathology, social work, and nursing. NEOMED programs include MD and PharmD.

Observations/Outcomes: Our central strategy has been the creation of a faculty champions group that brings together disciplinary perspectives across the two institutions. Successes include completion of a TeamSTEPPS workshop and an interdisciplinary seminar on death and dying and exploration of experiential IPE opportunities and use of an academic-focused electronic health record within IPE activities. Challenges include melding the cultures of the institutions and disciplines, managing differences in the academic schedules, creating a staff support structure, and determining a sustainable financial model.

Conclusion: Academic institutions without a full range of health professions programs need to seek partnerships to develop robust IPE programs. Convening a group of committed faculty champions across institutions can be an effective strategy for moving the IPE agenda of each institution forward.