ATHLETIC TRAINING EDUCATION JOURNAL

www.natajournals.org
ISSN: 1947-380X
DOI: 10.4085/1304377

Athletic Training Educators' Conference
February 15–17, 2019
Grapevine, TX

8813: Athletic Training Student Perception Between Information Taught in the Classroom and What Is Used in Practice

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Context: Although highly researched in the fields of nursing and medicine, little research has been conducted on the presence of a theory-practice gap in athletic training. The presence of a theory-practice gap could be problematic, forcing students to adapt what they are learning in the classroom from faculty athletic trainers to what they are using with their practicing athletic trainers in the clinical setting and vice versa. **Objective:** The purpose of this study was to assess if students perceived a difference between athletic training skills that are taught in the classroom and athletic training skills that are practiced in the clinical setting. **Design:** Cross-sectional. **Setting:** Population based. **Patients or Other Participants:** Four hundred thirty-five undergraduate athletic training students (298 females, 125 males) in the clinical/professional phase of their program. **Data Collection and Analysis:** Online survey consisting of 11 questions aimed to measure students' perception between what is taught in the classroom setting versus what is taught in their clinical experiences. Content validity of the survey was determined by the relationship of the questions to the existing research outlined in the literature review. Topic relevance and breadth of knowledge related to the domain of the theory-practice gap in nursing and medical research informed the survey questions. The survey tool addressed the presence of skill discrepancies between classroom and clinical experience and how frequently discrepancies were noticed by participants. Raw data were housed in Qualtrics which was transferred to SPSS for analysis. Measures of central tendency and measures of variability were evaluated. Chi-square was used as a method of analysis to compare percentages between inexperienced and experienced athletic training students. All tests of significance were carried out at an α level of $P \leq .05$. **Results:** Respondents stated that they did perceive a difference between what they were taught in the classroom and what was used in their clinical experiences/rotations (62.8% responding yes and 30.6% responding no). A significant difference was not found between inexperienced and experienced athletic training students regarding their perception of a difference between the classroom and their clinical experiences ($\chi^2 = 0.03$, $P = .86$). Three educational competencies resulted in significant findings between the inexperienced and experienced athletic training students (evidence-based practice [$\chi^2 = 7.41$, $P = .03$], therapeutic intervention [$\chi^2 = 8.78$, $P = .01$], and health care administration [$\chi^2 = 9.29$, $P = .01$]). Experienced athletic training students perceived more of a difference in these content areas between the classroom and clinical experiences. **Conclusions:** The findings of this study suggest that a theory-practice gap does exist between what is taught in the classroom and what is taught in the athletic training clinical setting. Experienced students perceived a greater theory-practice gap in the areas of evidence-based practice, therapeutic interventions, and health care administration. **Key Words:** Theory-practice gap, students' perception.

8833: Improving Evaluation of Pedagogy in Clinical Experience: Piloting Doyle's Task Systems with Athletic Training Students and Preceptors

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Context: Athletic training programs often look to preceptors to assist with the evaluation and education of athletic training students' (ATSs') aptitude within these competencies. However, few formal clinical education pedagogical evaluation frameworks have been proposed or tested. In particular, tools to better understand behavioral dynamics and clinical education environments created between the preceptor and ATSs are lacking, but effective evaluation of these facets of clinical education may be particularly crucial to optimize ATS learning. **Objective:** The purpose of this study was to pilot Doyle's task systems to quantify interactions between preceptors and ATSs during both clinical experience practice preparation and practice sessions. The framework's sensitivity to difference in task system time allocation between faculty and graduate student preceptor was also evaluated. **Design:** Qualitative methodology was the mode of inquiry. **Setting:** The setting was an entry-level bachelor's Commission on Accreditation of Athletic Training Education–accredited athletic training education program at a small private school in the Northeast. **Patients or Other Participants:** Current college staff members (faculty and graduate students) with varied years of work experience (n = 6) were purposively selected; ATSs (n = 8) who were currently working with preceptors in clinical education at the time of the study were also selected. **Data Collection and Analysis:** To evaluate the feasibility and reliability of using Doyle's task systems to quantify interactions of preceptors and ATSs, field observa-

tions were conducted during regular athletic practice sessions. The researcher made note of any behavior that occurred within the instructional, managerial, and social task systems. Observational field notes were inductively coded using constant comparative methods. Reliability and validity were established through member checks, peer debriefing, and prolonged engagement. Once categorized, field observation count data were analyzed using STATA 15.0 in order to compare overall allocation of clinical education time across systems, as well as difference between preceptors during practice sessions and practice preparation. **Results:** Significant differences in the instructional task system during practice preparation and practice sessions were noted for faculty versus graduate student preceptors. Faculty preceptors allocated significantly more time to hands-on activity ($P < .001$) during practice preparation and practice sessions. Significant differences ($P < .001$) were also found for faculty preceptors with regard to discussion. Graduate student preceptors spent significantly more time during practice preparation and practice sessions in regard to setup and breakdown ($P < .001$) compared with faculty preceptors. Faculty preceptors used significantly more communication ($P < .001$) during practice preparation and practice sessions ($P < .05$) compared with graduate student preceptors. **Conclusions:** These findings demonstrate task systems could be used to reliably and validly quantify and evaluate differences in clinical performance between type of preceptor and type of session. Doyle's task systems can help understand how to better improve clinical education and graduate student preceptor performance in future trials.

8835: Health Care Administration and Professional Responsibility Courses in Professional Athletic Training Programs: A Curricular Analysis

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Context: The 7th edition of the Athletic Trainer Practice Analysis Study identified domain 5, Health Care Administration and Professional Responsibility (HAPR), as an aspect of the entry-level knowledge, skills, and abilities of an athletic trainer, with 13% of the Board of Certification exam questions stemming from the domain. Previous research has identified that novice athletic trainers feel they lack the preparation and skills associated with HAPR as they begin their clinical practice. **Objective:** To analyze the curricula of professional athletic training programs regarding the length and plan of study as well as the integration of HAPR courses. **Design:** Curricular content review as it relates to HAPR. **Setting:** Professional program Web site review of the plan of study, degree details, and course descriptions. **Patients or Other Participants:** One hundred thirty-one professional athletic training programs delivered at the graduate level as identified on the Commission on Accreditation of Athletic Training Education (CAATE) Web site in June 2018 were eligible for the analysis. For professional programs that offered both an accelerated (3 + 2) and a traditional (2-year) track for the degree, analysis occurred for only the traditional-track curriculum. Six programs were excluded for either lack of institutional degree approval or missing data, for a final count of 125 programs. **Data Collection and Analysis:** Data were collected and recorded into a custom spreadsheet by 2 researchers regarding the descriptive indicators of the program. Programs with missing indicators were contacted via e-mail to request the information. Descriptive analyses were performed. **Results:** Most of the programs (n = 85, 68%) were active and in good standing with the CAATE and offered a master of science degree (n = 90, 72%). Most programs (n = 117, 93.6%) offered a traditional master's degree option with a range from 4 to 14 (mode = 6) terms, and 38 to 98 (mean = 60 ± 10) credits for the traditional 2-year programs. The average program offered the HAPR course in the fifth term, or at the 79% completion mark. When analyzing HAPR coursework, course names varied, with terms such as *organization, administration, healthcare,* and *leadership*, and the course was typically 3 credits. Two programs did not an offer a specific HAPR course and relied on clinical education. Moreover, 51 of the 123 programs with coursework (41.5%) taught more than one course in their curriculum related to HAPR. For all programs, the total credits related to HAPR courses in the degree ranged from 0 to 10 (mean = 4 ± 2). When exploring the ratio of focus on HAPR course credits to program credits, the average ratio of HAPR credits was 1:15, which is equivalent to only 6.4% (min = 0%, max = 21.4%) of the total degree. **Conclusion(s):** According to the data, most programs are disproportionately representing HAPR content within their curricula. HAPR courses are typically offered near the end of the plan of study. It is possible that a hidden curriculum exists whereby the unspoken values of an educational program result in a lack of emphasis in the plan of study without aware intent from the program administrators. These actions, even without intent, may be disadvantaging students within this domain. **Key Words:** Organization, curricular design, hidden curriculum.

8846: Interprofessional Education Collaborative: Creating Interprofessional Education Opportunities Across Institutions

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Context: Interprofessional education (IPE) is defined as the opportunity for health care students to learn from, about, and with each other, to facilitate teamwork and improve patient outcomes. The delivery of IPE is foundational to health care education and will be required in professional athletic training programs with the 2020 Commission on Accreditation of Athletic Training Education standards. Current research in athletic training programs has identified the expansion of IPE opportunities by 14%; however, current research suggests there is a need for improvement in institutional readiness for providing IPE activities. While the inclusion and expansion of IPE is necessary, limiting factors include institutional structure (housing of athletic training program) and resources (budget, infrastructure, communication, and personnel). At institutions affected by limiting factors, athletic training program administrators should plan and collaborate with outside institutions to ensure they are able to integrate IPE learning opportunities for their students in compliance with the 2020 standards. **Objective:** To describe a model of IPE across 5 academic institutions with various health care education programs in a metropolitan area. **Background:** The IPE Collaborative was developed to provide IPE

opportunities to students across health care professions within a metropolitan area. Collaborating across many institutions has brought together a wider variety of health care professions including athletic training, physical therapy, nursing, osteopathy, pharmacy, physician assistant, occupational therapy, respiratory therapy, EMT/paramedic, and medical assisting, giving students broader learning opportunities. **Description:** Each institution develops and supports IPE activities throughout the academic year. IPE activities are vetted and approved by the IPE Collaborative planning committee, which consists of faculty from each institution. Each activity must have specific learning objectives that align with the IPE competencies. The activities also integrate a variety of teaching and learning strategies, such as action-based learning, exchange-based learning, simulation, and e-learning. One such activity, "Medication Titration," is a simulation where students identify the patient's conditions where medication titration was required. Students are then asked to participate as a member of an interprofessional team to care for the patient. Another activity, "Pandemic," is an exchange-based IPE activity, where students collaborate on ethical dilemmas and decisions during an emergency outbreak scenario. The IPE Collaborative also hosts "Student IPE Day" for approximately 1000 students, representing 12 health care professions, each spring to serve as an introductory IPE activity. Students are placed into interprofessional groups to complete a trivia activity and a case study, with the emphasis on learning about the roles and responsibilities of each other's professions. As new programs are represented within the IPE Collaborative, activities are adjusted to integrate those students into activities; however, it's important to note not all activities integrate all professions. **Clinical Advantages:** Athletic training students will have the opportunity to collaborate with students from 12 other health care professions during activities sponsored by the IPE collaborative, as compared with 1 other profession within our institution. **Conclusion:** Many institutions may only have a few health care education programs housed within their campus. However, exploring collaboration opportunities between multiple institutions will likely increase IPE opportunities for all students. **Key Words:** Interprofessional education, cooperative learning, exchange-based learning, action-based learning.

8847: Comparison Between Educator, Standardized Patient, and Postprofessional Athletic Training Learner Evaluations of Clinical Performance

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Context: Standardized patient (SP) encounters are a form of assessment of interpersonal and clinical skills in health care education programs. An objective assessment of SP encounter performance should include multiple forms of feedback from the educator, SP, and learner to promote professional development. However, assessment of clinical strengths has been shown to differ based on perception among evaluators. **Objective:** To compare objective evaluations completed by the educator, SP, and learner following an SP encounter. **Design:** Cross-sectional. **Setting:** Collaborative simulation center with a cohort from one Midwestern university. **Subjects/Participants:** Three educators and 3 trained SPs evaluated 15 postprofessional athletic training (PPAT) learners without previous SP experience who were enrolled in the first semester of a PPAT program. **Intervention(s):** The PPAT learners completed 1 of 3 orthopedic and musculoskeletal SP encounters that were designed with an emphasis on patient-centered care. The SP cases were content validated by athletic training educators and practicing clinicians. **Main Outcome Measure(s):** During the encounter, the educator observed from a control room and assessed the PPAT learners' interaction with the SP using a reliable SP assessment tool (35-item) that emphasized data gathering, interpersonal skills, and patient education. The tool was modified from a content checklist (performed, not performed, performed incorrectly) to a 5-point Likert scale that assessed the level of performance per task. Immediately following the SP encounter, the SP and learner both completed a 10-item, 5-point Likert scale evaluation tool. We calculated the mean item score for the educator, patient, and student self-evaluation (scale: 5 = *excellent*, 4 = *above average*, 3 = *average*, 2 = *below average*, 1 = *poor*) and then compared patient and student self-evaluation scores with educator scores using Wilcoxon signed-rank tests. Significance was set at $P < .05$ a priori. **Results:** The educator scored the learners as average (mean = 3.2 ± 0.3) on their SP encounter performance, while learners perceived their performance was above average (mean = 3.7 ± 0.5) and the SPs perceived the learners as excellent (mean = 4.6 ± 0.3) in their health care delivery. We determined that both the educator and learners ($\chi^2 = -2.817$, $P = .005$), as well as the educator and the SPs ($\chi^2 = -3.621$, $P < .001$), scored the performance significantly differently. **Conclusions:** This study used multiple forms of feedback to assess clinical performance and interpersonal skills of PPAT learners. We identified that educators score lower than the learner and SP themselves, which could be influenced by the educational interactions and expectations through coursework prior to the SP encounter. Additionally, our study used a Likert scale rather than a checklist to assess performance as PPAT programs are intended to advance clinical practice. As such, the learners from our sample identified potential for improvement in their health care delivery, whereas the SPs felt that the learners were providing excellent care. Educators should provide multiple forms of feedback to their learners to encourage self-reflective practice. Furthermore, if educators choose to use SP encounters as a means of summative assessment, it should not be solely based on one evaluator but rather from all perspectives of the encounter. **Key Words:** Assessment, feedback, clinical education.

8849: Implementing Interprofessional Education into Athletic Training Curricula: The Team Education Advancing Collaboration in Healthcare (TEACH!) Curriculum

Sage BW: Indiana University

Context: The World Health Organization (2010) defines interprofessional education (IPE) as "when students from 2 or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes." The incorporation of planned IPE into athletic training curricula has been included as a standard within the new *2020 Standards for Accreditation of Professional Athletic Training Programs*. The annotation to this standard permits programs to use a variety of methods to ensure students have multiple exposures to IPE. **Objective:** The objective of this poster is to introduce the Team Education Advancing

Collaboration in Healthcare (TEACH!) curriculum to athletic training educators as a model for the implementation of IPE into athletic training curricula. **Background:** TEACH! is a longitudinal curriculum that students in the Indiana University Schools of Dentistry, Fairbanks School of Public Health, Health and Rehabilitation Sciences, Medicine, Nursing, Optometry, Bloomington Public Health, and the Purdue College of Pharmacy complete over the course of their studies. The curriculum is comprised of 6 learning anchors: (1) Introduction to Team Science, (2) Interprofessional Communication Skills, (3) Application of Interprofessional Teamwork Skills, (4) Integration of Interprofessional Teamwork Skills, (5) Evaluation of Interprofessional Teamwork, and (6) Integrating Interprofessional Teamwork into Practice. Each 3-hour learning anchor brings 100–150 students, from a large variety of health care disciplines, together to work collaboratively on improving health outcomes. The style and format of each anchor is progressive in nature, beginning with an interrupted case, progressing through vignette cases and standardized patients/actors, and ending with a simulation. **Description:** The professional athletic training program at Indiana University incorporates the first 4 anchors of the TEACH! curriculum into the final year of the program. A flow chart will depict the TEACH! curriculum, including the 3-phase framework of exposure, immersion, and entry to practice. The poster will show where the TEACH! curriculum is embedded into the athletic training curriculum, and how it supports the mission, objectives, and outcomes of the program. **Clinical Advantages:** Students completing the TEACH! curriculum are well versed in the principles of IPE and are better equipped for interprofessional practice as an autonomous clinician. The understanding of other allied health care professionals, and the experience gained working alongside them, can improve health outcomes as students enter the profession. Additionally, the participation of athletic training students in the TEACH! curriculum improves the visibility and appreciation of the athletic training profession among peer health care providers. **Key Words:** Interprofessional education, curriculum, TEACH!.

8852: Predictors and Perceptions of Good Practice in Teaching Among Athletic Training Program Directors

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Context: Effective teaching is often used as a measure of academic success for students and for the evaluation of faculty. Factors such as content expertise, educational background, and years of teaching experience may contribute to effective teaching. Limited empirical research has examined teaching practices of those in the program director role in athletic training education. **Objective:** The purpose of this study was to examine program directors' perception of teaching effectiveness and to explore factors that may influence good teaching practice. **Design:** Explanatory sequential mixed-method design. **Setting:** Professional athletic training programs at the undergraduate level. **Participants:** One hundred program directors (53 males, 47 females, age = 45.89 ± 8.68 years) representing 10 National Athletic Trainers' Association districts. **Data Collection and Analysis:** Initial data were collected using the Seven Principles for Good Practice Faculty Inventory by Chickering & Gamson. Correlational analysis using the Pearson correlation coefficient was used to analyze the association between the statements about good practice and years of teaching experience, courses related to pedagogy during higher education, continuing education in pedagogy, and academic workload. Based on significant findings of the survey results, criterion sampling was used to identify 12 participants for individual interviews. The structured interviews explored factors and experiences that contributed to teaching practice and the elements perceived as valuable for establishing good practice. The transcripts of the interviews were examined through a social constructivist lens. Two researchers analyzed the results using consensual qualitative research. **Results:** Survey results indicated that participants' effectiveness and nature of teaching were characterized by a higher use of student faculty contact, time on task, and high expectations. Additionally, results showed a lower use of prompt feedback and diverse talents and ways of learning among participants. Furthermore, the number of courses completed in higher education related to pedagogy and the number of hours of continuing education in pedagogy were both significantly correlated to the use of good practice in teaching. Themes arising from the factors and experiences that positively contributed to teaching practices included professional development, transformation of teaching, building relationships with students, and previous clinical experience. In addition, program directors perceived that the integration of personal clinical experiences and didactic coursework, the preparation of students for practice, and the incorporation of a variety of student-centered teaching strategies were valuable elements for establishing good practice in teaching. **Conclusions:** These findings contribute to the understanding of potential strategies available to enhance preparation of athletic training educators. This study suggests that it may be beneficial for athletic training educators to include coursework in their higher education preparation and to seek professional development opportunities specifically related to pedagogy. Faculty development opportunities targeted to athletic training educators could focus on the principles of good practice in teaching. **Key Words:** Athletic training education, continuing education, clinical experience, principles of good practice.

8856: Implementing Interprofessional Educational Experiences into a New College of Health

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Context: Providing efficient patient-centered care is a focus for all health care professionals. As health care evolves, more specialties and subspecialties develop, and providers are encouraged to practice in a collaborative, team environment to offer better patient care. Therefore, there is a need to prepare future providers similarly to how they will practice, in a team-oriented fashion. **Objective:** To describe how interprofessional education (IPE) experiences were implemented in a newly formed college of health at a Midwestern institution. **Background:** IPE brings learners from multiple disciplines together for a common educational experience to learn from, about, and with each other. The focus is to develop learners' abilities to provide patient care as part of a collaborative team by becoming more familiar with how each profession approaches patient care. Many educational techniques have been used for IPE, including lecture, observation, discussion, and simulation. Research indicates IPE experiences improve

students' understanding of the roles of other health care providers and their ability to communicate effectively. **Description:** As our new college of health developed, there was a deliberate focus on creating and implementing IPE experiences. Faculty members from different programs (ie, athletic training, nutrition and dietetics, nursing, speech pathology and audiology, social work, and counseling) created 4 IPE experiences, and 1 occurred during each semester in the 2016–2017 and 2017–2018 academic years. In both fall semesters, an introductory IPE event focused on patient safety occurred. Student learners, grouped into interprofessional teams, introduced themselves, explained their health care profession, and watched a video. In the video, the family member of a patient detailed interactions with health care providers throughout a course of treatment where multiple medical errors occurred. Following the video, learners discussed the medical errors and methods for preventing such errors. Simulated-patient encounters occurred during the spring semesters. One simulation involved a diabetic patient who was noncompliant with medical advice, and the other was an athlete with a concussion. For both encounters, learners discussed the approach to treatment and management of the patient. **Clinical Advantages:** Learning and collaborating with other health care students provides a better understanding of each profession's role and scope of practice, improves communication skills, and helps develop the ability to collaborate. Bringing learners together to discuss their unique perspectives on patient care engages students and prompts them to articulate their thoughts coherently related to a patient or a pathology and their professional approach to care. Simulation-based activities, such as standardized patients, provide experiences where learners communicate and operate as a collaborative unit. Learners received feedback from faculty, facilitators, and peers during the debriefing following the simulated-patient counter. **Conclusions:** All 4 of the college of health IPE activities provided opportunities for students to discuss patient care as part of a team. IPE is an integral component of health care education, and a variety of approaches can be used to implement IPE. Providing opportunities for students to practice in collaboration before entering the workforce can build individual professional confidence and the ability to effectively contribute in a collaborative work environment. **Key Words:** Collaboration, interprofessional practice, simulation.

8864: Implementing Infographics into Cardiopulmonary Resuscitation and First Aid Education to Affect Students' Achievement and Attitude Toward Prehospital Care and Education

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Context: Effective health communication and engagement in helping behaviors during an emergency are critically important. One strategy to increase effectiveness and engage students in learning is through infographics. **Objective:** To (1) explore infographics as a learning tool, (2) examine infographic templates and investigate what comprises a great infographic for learning, and (3) specifically examine how infographics influence cardiopulmonary resuscitation (CPR) and first aid education. **Background:** Information graphics or infographics are an educational medium to provide information targeted to a diverse population with highly variable literacy skills. The National Assessment of Adult Literacy reports that one-third of US adults have basic or below basic health literacy skills and 14% of American adults understand only simple text(s). Even those who possess higher health literacy skills prefer shorter, more straightforward messages. **Description:** Infographics use prominent pictorial representations of information (eg, research data, introducing and reinforcing a concept) intended to illustrate data efficiently and effectively through images, drawings, diagrams, pie charts, graphs, and succinct text. Infographics are advantageous because of their power to improve comprehension through visual observations of patterns and trends while feeding into learners' natural tendency to learn via interacting with small but solid pieces of grounded information. A good infographic reinforces to learners what pieces of information are the most important and impactful to patient-centered outcomes. Infographics have the most significant impact when learning prehospital emergency care skills. Some principles of infographic design include (1) ***audience targeting*** (for whom the infographic is intended to reach, providing context and removing technical jargon, ensuring the work is accessible to the broadest possible audience), (2) ***compelling title to attract students*** (considered the most impactful component [eg, "Cardiac Arrest" versus "Heart Attack"]), (3) ***narrative*** (developing a definite start and end point to ensure the learner process the information in the order intended and making sure no information is missing [eg, A > B > C or C > B > A], (4) emphasize critical messages (prioritized by increasing the size of the relevant component as well as increasing text size and using striking colors), (5) balance images, charts and text (essential to balance data visualizations, images, and words). **Clinical Advantage(s):** Infographics add value by increasing and engaging the students in the content under investigation. Information is more likely to be retained if acquired from an infographic than from text alone. Evidence suggests that infographics support learning transfer and knowledge retention with different thinking styles, assist learners to become actively involved in the learning process, lead to permanent learning, and support the development of creative and productive learning activities while improving understanding and concentration during a learning session. **Conclusion(s):** Infographics can be a powerful educational tool to influence CPR and first aid education by (1) communicating a consistent message, (2) presenting data or information in a way that is compact and easy to comprehend, (3) analyzing data in order to discover cause-and-effect relationships, and (4) periodically monitoring the route of specific parameters. **Key Words:** Pedagogy, data visualization, student retention, infographics.

8866: Job Interview Anxiety in Athletic Training Students

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Context: The millennial generation has a reputation for lacking face-to-face communication skills because of their preference of using technology as the primary means of communication. As millennial students graduate and seek employment, they may experience high levels of interview anxiety. Individuals who experience interview anxiety suffer a range of symptoms. Minor symptoms of anxiety may include sweaty palms, whereas more severe symptoms include the inability to formulate and express thoughts. The literature categorizes

interview anxiety into 5 distinct dimensions: communication, appearance, social, performance, and behavioral. For students to transition to professional practice, they need to communicate effectively during a job interview to secure employment. Identifying and learning to minimize job interview anxiety may better position students to be successful in gaining employment. **Objective:** To identify the areas in which students experience anxiety while interviewing for a job. **Design:** Mixed-methods quantitative and qualitative research design. **Setting:** Simulation lab. **Patients or Other Participants:** A convenience sample of 41 athletic training students enrolled in their final year of a Commission on Accreditation of Athletic Training Education–accredited program located in southeast Florida participated in this study. **Interventions:** Participants completed a simulated job interview (independent variable) with 2 standardized recruiters. After the simulated job interview, each participant completed the Measure of Anxiety in Selection Interviews (MASI) questionnaire designed to assess levels of the following self-reported anxiety dimensions: communication, appearance, social, performance, and behavioral. This 30-item questionnaire identified individuals with high or low levels of anxiety. A stratified sample of high- and low-anxiety participants completed semistructured telephone interviews to gain a deeper understanding of anxiety experienced by students during a job interview. **Main Outcome Measures:** Self-reported anxiety as measured by the MASI and semistructured interviews. **Results:** A nonparametric, 1-sample Kolmogorov-Smirnov test was used to analyze the data. Participants experienced significant ($P < .05$) levels of communication ($M = 16.54$, $SD = 2.57$), performance ($M = 16.34$, $SD = 5.71$), and behavioral ($M = 15.83$, $SD = 4.17$) anxiety. Themes identified from the interviews support these findings. **Conclusions:** Interviewing is directly related to the ability to communicate with others, and the need for outcome-based communication training has been identified. Recognizing the manifestations of anxiety experienced by athletic training students has curricular and professional development implications. Education and workshops to help students improve their interviewing skills and anxiety coping skills are warranted. **Key Words:** Millennial student, transition to practice, communication.

8870: Program Administrators' Perceived Challenges Associated with Developing Preceptors

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Context: While research has revealed the characteristics, behaviors, and skills that help improve preceptors' success in meeting the objectives of clinical education, a gap in the literature exists as to how preceptors are being developed to ensure they exhibit such characteristics, behaviors, and skills. Understanding potential barriers that prevent program administrators from providing high-quality preceptor development opportunities will help develop future strategies and initiatives that enhance the development of preceptors. **Objective:** To explore the challenges program administrators (ie, program directors, clinical education coordinators) encounter when developing preceptors for graduate professional athletic training programs. **Design:** A consensual qualitative research approach guided this study. **Setting:** Individual semistructured phone interviews. **Patients or Other Participants:** Eighteen program administrators (17 clinical education coordinators, 1 program director; 5.92 ± 4.19 years of experience) participated in this study. Data saturation guided the number of participants. **Data Collection and Analysis:** Semistructured interviews were recorded and transcribed verbatim. A 4-person research team used a consensus process to analyze data and identify emergent themes. A consensual codebook that represented the data was created after researchers independently coded the data and discussed emergent themes. Credibility of the findings was established through the use of multiple researchers, an external auditor, and member checks. **Results:** Participants identified several challenges related to preceptor development, including what content to include, how and/or when to deliver preceptor development, and the process of creating and modifying preceptor development resources. Presenting content that is relevant and useful to a variety of preceptors from different employment settings and varying levels of experience was difficult. Participants reported not all preceptors were interested in learning about program policies and procedures, new accreditation standards, and/or new clinical skills. Variability in what content to include was challenging to balance when scheduling a large formal meeting of preceptors. Geographical location and busy work schedules made it difficult to decide how or when to deliver consistent and ongoing preceptor development. Finally, participants discussed their workload; while this part of their role was valued, there was no additional release time to plan, organize, and execute preceptor development. Finding adequate time to plan and develop content for preceptors with varying experience levels, interests, and needs was taxing. In addition, some preceptor development, due to scheduling, occurred individually, which further increased the workload for participants. **Conclusions:** While developing a large network of high-quality preceptors is essential to foster clinical education experiences for students, program administrators may encounter challenges. Different levels of experience and educational needs of preceptors may make it difficult to determine which content to include, especially as clinical immersion experiences increase in number. Administrators may need to offer multiple preceptor development options to accommodate the varying levels of experience, desired content, and geographical locations of preceptors; however, this would subsequently increase the workload challenge. Educating institutional administrators about the importance and demands of developing preceptors may open dialogue regarding workload and necessary resources associated with preceptor development. Future research should examine effective educational techniques to disseminate preceptor development. **Key Words:** Preceptor development, clinical teaching, clinical education.

8871: Integration of the 4 × 4 Matrix into Athletic Training Curriculum to Teach Exercise Progression and Regression

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Context: Students often struggle in clinical decision making with exercise selections for their patients. Most athletic training programs teach the disablement model, which allows students to identify impairments and functional limitations of the patient. However, simply understanding these general categories does not leave the student with information about patient positioning (stability) and loading, which is the basis for making appropriate exercise selections. Using the 4 × 4

matrix in rehabilitation plan construction gives the student a framework for making exercise selection decisions. **Objective:** Demonstrate a method for integrating the 4 × 4 matrix into athletic training curriculum in a way that will allow for scaffolding and learning over time. **Background:** The development of clinical reasoning is paramount in education of athletic training students. Students often need to consider a multitude of factors when developing rehabilitation programs. The development of critical thinking for the rehabilitation process is often learned in the clinical setting while students are working with actual patients. However, the students may only be observers and the clinical preceptors may fail to include them in the reasoning involved in their decision-making process. This disconnect may leave the student without the necessary tools to make clinical decisions on exercise selection, progression, or regression. Educators can increase critical thinking in rehabilitation decisions by using the 4 × 4 matrix as a framework for rehabilitation program development. The integration of the 4 × 4 matrix into didactic curriculum can provide a useful framework that can bridge the gap to clinical practice. **Description:** The 4 × 4 matrix is a framework that introduces the clinician to progressions of patient positioning (stability) and loading. The 4 positions of stability advance in the following manner: supine/prone, quadruped, half/tall kneeling, standing. Loading progresses in the following manner: assisted/unloaded, unloaded, assisted/loaded, and loaded. The concepts behind the 4 × 4 matrix should be introduced early and often. The underlying principles of the matrix, stability and loading, can be introduced in foundational courses like kinesiology. These concepts can be expanded upon in therapeutic exercise courses by relating the information to the disablement model and the goals that have been set for the patient. Lastly, students should demonstrate their ability to use the 4 × 4 matrix in working with standardized patients in practicum courses. Implementation of the 4 × 4 matrix into patient care decisions should be included in all treatment and rehabilitation courses. **Clinical Advantage(s):** Providing students with a conceptual framework to follow when creating therapeutic exercise programs will enhance their clinical decision making and improve rehabilitation program development. **Conclusion(s):** The 4 × 4 matrix is a valuable tool that should be considered when teaching progression/regression in therapeutic exercise. The concepts can be taught early in the curriculum in foundational courses and then should be expanded upon in more advanced courses and practicum courses. **Key Words:** Therapeutic exercise, critical thinking, clinical decision making.

8878: An Investigation of the Relationships Between Leadership Practices of Athletic Training Program Directors and Program Performance on the Board of Certification Examination

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Context: Few athletic training program directors (PDs) have completed formal leadership training to prepare them for educational roles. Literature suggests there is a need for leadership within athletic training, but specific leadership behaviors have not been documented (Kutz, 2006). It is important for PDs to understand their leadership practices to enhance student academic success. **Objective:** The purpose of this study was to investigate the relationships between athletic training students' (ATSs) perceptions of their PD's leadership behaviors and overall athletic training program success (measured by Board of Certification [BOC] examination first-attempt pass rates). **Design:** A descriptive study was performed using an online 360° feedback assessment survey, the Leadership Practices Inventory-360 (LPI). **Setting:** Subjects completed online surveys within computer labs or on personal computers at their own convenience. **Participants:** A regional sample of accredited undergraduate entry-level athletic training education programs was selected. Five universities located in the mid-Atlantic region participated (5 PDs and 81 ATSs). **Data Collection and Analysis:** The LPI survey was administered through an online format where participants subjectively and objectively reported the frequency of the PDs' leadership behavior; defined by Kouzes and Posner's (2002) The Five Practices: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. The 5 leadership practices were the independent variable and program performance on the BOC examination was the dependent variable. The LPI has been deemed valid and reliable, the internal reliability measured by Cronbach $\alpha > .75$ level. Findings showed statistically significant influences between ATS perceptions of their PD demonstrating all 5 leadership practices and satisfactory BOC exam pass rates, analyzed by a Pearson correlation coefficient. Findings also revealed leadership practice "Model" was significantly predictive of ATSs' first-attempt pass rates, analyzed by a stepwise linear regression. **Results:** BOC exam pass rates were satisfactory when ATSs perceived their PD portraying all 5 leadership practices. A positive correlation was indicated for BOC examination scores among Model ($r(79) = .415$, $P < .05$), Inspire ($r(79) = .377$, $P < .01$), Challenge ($r(79) = .392$, $P < .01$), Enable ($r(79) = .303$, $P < .01$), and Encourage ($r(79) = .277$, $P < .05$). A stepwise linear regression model revealed "Model the Way" ($\beta = .415$) predicted 16% of the dependent variable first-attempt pass rate. **Conclusions:** Athletic training students who viewed their PD frequently using all 5 leadership practices resulted in satisfactory BOC examination scores. Students who viewed their PD frequently using leadership practice "Model the Way" resulted in increased likelihoods of first-attempt BOC examination pass rates. Frequently demonstrating all 5 leadership practices will increase engagement, commitment, loyalty, and motivation from constituents (Kouzes & Posner, 2012). PDs' leadership effectiveness creates positive student perceptions, which increase student commitment, engagement, and performance. **Key Words:** Leadership, athletic training education, educators, program directors.

8879: Teaching Behavioral and Mental Health in Athletic Training

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Context: The need for mental health care has increased in prevalence in the United States, and athletic training students must be prepared to identify patients in crisis, refer patients to appropriate medical professionals, and provide follow-up care. **Objective:** To describe delivery of a behavioral and mental health course. **Background:** Athletic trainers are in close contact with patients, often seeing them daily, and are in a unique position to notice changes in behavior that could indicate a mental health concern. Patients rely on the athletic trainer's ability to identify at-risk behaviors or symptoms of a

mental health condition as well as to accurately refer to the appropriate medical professionals. Providing adequate follow-up care and support to patients, including collaboration with other providers, is essential for successful treatment. Additionally, the 2020 Standards for Accreditation of Professional Athletic Training Programs require instruction regarding identification, referral, and providing support for patients diagnosed with behavioral health conditions. **Description:** The overarching objective of this course was to prepare students to identify, refer, and manage patients in need of mental health care. An overview of the health care system and identification of different providers specific to behavioral and mental health care occurred. Next, identification and referral were discussed for a variety of different mental health conditions including anxiety, depression, grief, substance abuse, suicidal ideation, schizophrenia, and attention deficit, bipolar, and eating disorders. Seminal works such as the National Collegiate Athletic Association Mental Health Best Practices and the National Athletic Trainers' Association consensus statements on recognizing and referring student-athletes with psychological concerns at both the collegiate and secondary school levels were discussed. The specific needs of populations more prone to high levels of stress and mental health concerns, such as those with a history of physical, verbal, and/or sexual abuse or sexual harassment and members of the LGBTQIA+ community, were discussed. Experts from the campus counseling center and victim services discussed their health care approach and collaboration with athletic trainers and other health care providers. Students read and synthesized various position and consensus statements and other applicable health care literature. Assignments included creation of a mental health emergency action plan and designing an educational session for coaches or student-athletes over various mental health concerns (eg, recognizing anxiety, depression, suicidal behaviors). **Clinical Advantage:** The practicing athletic trainers of today are engaging in interprofessional practice and increasingly referring and managing patients with behavioral health concerns (eg, depression, anxiety, suicidal ideation, eating disorders). Providing students with a strong academic foundation in the area of behavioral health is critical in their ability to engage in patient care during clinical education. Education in the classroom drives student learning and allows rich discussions and shared decision making between preceptors and students regarding the patient care they provide. **Conclusion:** This course format was interactive and enabled discussion of behavioral health concepts in a collaborative manner between students. Students were able to discuss concepts with experts and one another in order to learn about the specific topics and develop a deeper understanding of course material. **Key Words:** Behavioral health, curricular design, counseling.

8881: Privacy Protection Behaviors and Usage Analysis for Health Care Social Media Accounts

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Context: Social media (SoMe) usage is increasing throughout society and has been integrated into the medical field. Suggested reasons for SoMe use have been to share unique cases, serve as a resource for educational material, provide guidance/advice to health care providers, and advocate for health care professions. However, it is unclear whether the posting behaviors of health care SoMe accounts align with federal privacy protection acts. **Objective:** To analyze the usage, content shared, and privacy protection of a medical SoMe Twitter account associated with athletic training and health care. **Design:** Media content analysis. **Setting:** Online, publicly available SoMe site. **Patients or Other Participants:** One SoMe site from Twitter (@injury pics) was identified with 24 800 followers. The site has been active since May 2012 with a profile biography stating the page is "dedicated to injury pics or any picture related to AT'ing." **Data Collection and Analysis:** An 8-item instrument was created to analyze the type of post (eg. picture and text, picture only) and author of the post (eg. injury pics, unknown individual, health care provider with evidence), describing content relative to the Board of Certification domains and body system categorization, patient identifiers, and if there was permission to post given. SoMe posts that were either written or shared from the site between September 14, 2017, to April 22, 2018, were screen captured and stored. Following establishment of reliability and construct validity of the instrument, 2 researchers performed a review and categorization of the posts using the instrument. A third researcher performed an external review to ensure that consistent coding occurred. Descriptive analyses were performed. **Results:** A total of 885 SoMe posts were screen captured. Most of the SoMe posts on @injurypics were retweets of text, pictures, and video from other accounts (n = 733/885, 82.8%) rather than originating from @injurypics (n = 152/885, 17.2%). Health care professionals and medical groups comprised the largest amount of the posts not originally authored by @injurypics (n = 371/733, 50.6%). Approximately half (n = 434/885, 49.0%) of the posts were not injury related. A small percentage of those total posts were related to professional advocacy (n=95/434, 21.9%), education (n=81/434, 18.7%), and not related to athletic training or medicine (n=144/434, 33.2%). A total of 744 posts (84.1% of the 855 posts) contained either text, picture, or video pertaining to 1 of the 5 domains of athletic training clinical practice, with examination, assessment, and diagnosis represented the most (n=457/744, 61.4%). Therapeutic interventions (n=48/744, 6.5%) were the least represented. When analyzing picture and video posts, 44.5% (394/885) of posts included people. From these, only 8/394 (2.0%) listed permission to post despite 117/394 (13.8%) including health information identifying factors such as full-face photographs or identifying numbers (eg. medical record number). **Conclusion(s):** SoMe can serve as a resource for educational material specifically related to injury and illness evaluation, assessment, and diagnosis. A majority of the information shared within @injurypics met federal regulations regarding privacy of personal health information; however, concerns remain about posts that include at least 1 form of identifiable information. **Key Words:** Twitter, health care education, federal regulations.

8885: Utility of a Critically Appraised Topic Project for Evidence-Based Practice Concept Knowledge in Professional Athletic Training Students

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Context: Athletic training students are required to receive instruction and the opportunity to engage in evidence-based practice (EBP) during their educational experience. Information regarding effective strategies for implementing EBP into curriculum is limited. A Critically Appraised Topic (CAT) project is one avenue for EBP concept delivery and application

that is currently being used by athletic training educators, but there is little evidence on the educational outcomes of this assignment. **Objective:** To determine athletic training students' knowledge of EBP concepts following the completion of a CAT project. The components of the CAT project included (1) development of a clinical question using the patient, intervention, comparison, outcome (PICO) format, (2) literature search and critical appraisal of relevant research articles, (3) synthesis of findings from 3 to 5 articles with the highest level of evidence, and (4) preparation of an overall clinical recommendation in both manuscript and poster form. **Design:** Pre/post survey assessment. **Setting:** One Commission on Accreditation of Athletic Training Education–accredited professional athletic training program. **Participants:** Convenience sample of 12 (males = 4, females = 8) junior-level professional athletic training students who were enrolled in a principles of research course. **Data Collection & Analysis:** Participants completed a CAT project in groups of 2 in order to fulfill curricular requirements. The Knowledge of Research Evidence Competencies (K-REC) survey was administered prior to and following the completion of the CAT project. The K-REC is a 9-item survey that collects data on cognitive EBP skills of entry-level allied health care students. The K-REC produces an EBP knowledge outcome variable with a maximum possible score of 12, with a higher score indicating greater knowledge of EBP concepts. Three additional open-ended questions were included in the posttest to gauge the participants' self-perception of EBP knowledge following the CAT project. **Results:** There was a statistically significant increase in K-REC knowledge scores from pre– ($M = 4.30 \pm 1.48$) to post–CAT project ($M = 7.67 \pm 1.19$, $t = -7.16$, $df = 11$, $n = 12$, $P < .001$). Following the project, participants reported the highest level of comfort in the literature search process, envisioned use in treating patients using a PICO-formatted clinical question, and a perceived need for further exposure to interpretation of results including statistical analysis. **Conclusions:** Following the completion of a structured CAT project, students demonstrated increased knowledge of EBP concepts. This CAT project was just 1 assignment implemented within the research course, and therefore may not be the only contributor to these knowledge gains. Successful completion of this project may assist students in being future generators and consumers of compilation evidence. More research is needed to confirm these findings. **Key Words:** Critical appraisal, knowledge transfer, survey.

8886: Athletic Training Students' Ability to Learn and Apply Interpersonal Communication Skills

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Context: Communication skills are an important attribute sought by employers, but many athletic trainers' communication skills are deficient, **Objective:** The purpose of this study was to determine the effectiveness of a 6-week communication skills training on athletic training students' interpersonal communication skills and whether athletic training students use interpersonal communication in the athletic training clinical education setting. **Design:** Mixed-methods baseline posttest control group study. **Setting:** Data were collected from a Commission on Accreditation of Athletic Training Education–accredited undergraduate athletic training professional program in a laboratory setting for baseline and posttesting. Repeated posttesting data were collected in the clinical education setting, **Subjects:** A total of 8 (1 male, 7 female) athletic training students enrolled in an athletic training professional program during fall 2018. The subjects varied in the level of the athletic training professional program (5 sophomores, 2 juniors, and 1 senior). The sampling scheme used was convenience sampling with groups stratified to balance demographic variables (gender and year in the athletic training professional program). **Interventions:** Students were observed during a patient encounter with a standardized patient using a modified Calgary-Cambridge Observation Guide–Medical Skills Evaluation during baseline testing, posttesting, and repeated posttesting. All subjects completed a self-assessment form following each encounter. The experimental group received 6 sessions of communication skills training with each consisting of 2 hours. **Main Outcome Measures:** Demographic information included gender, year in the athletic training program, previous communication training, and grade point average. Total scores on the modified Calgary-Cambridge Observation Guide–Medical Skills Evaluation were calculated using a repeated-measures analysis of variance to determine the impact interpersonal communication skills training had on an athletic training student's interpersonal communication skills during a patient encounter at baseline, posttesting, and repeated posttesting. Self-assessment forms were completed by the subjects following their patient encounters during baseline and posttesting. Descriptive and pattern coding were used to identify categories and themes from the data to develop themes and categories as to application of communication skills into clinical practice and athletic training students' perceptions with interpersonal communication skills. **Results:** Athletic training students improved their communication skills over time by a mean score of 10 out of 120 points once taught communication skills. Students perceived their communication skills to improve by a mean of 24.38 out of 120 points; research suggests this increase may be due to the student being less confident in a skill. Athletic training students' communication scores improved by a mean score of 23.75 out of 120 points when provided an opportunity to apply the skills learned in clinical practice. **Conclusions:** This study determined communication skills can be learned. Athletic training students attempt to incorporate communication skills into clinical practice. Lastly, students perceive their communication skills to be better due to low comprehension of the skill. Further investigation of communication skills in athletic training professional programs is recommended to determine how to incorporate communication skills training in athletic training professional programs. **Key Words:** Interpersonal communication, athletic training student, athletic training professional program.

8887: A Clinical Decision-Making Approach to Delivering Therapeutic Intervention Related Content

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Context: With the transition to the master's degree, athletic training programs are expected to alter their curriculum so that it is not simply a duplication of their undergraduate curriculum at the graduate level. In addition, the 2020 Commission on Accreditation of Athletic Training Education (CAATE) standards stress the importance of a patient-centered and evidence-based curriculum. This transition provides athletic training programs an opportunity to evaluate their curriculum organi-

zation and optimize its delivery. **Objective:** The aim of this presentation is to share how educators may teach therapeutic intervention content in an integrated way that mirrors clinical decision making and stresses patient-oriented care. **Background:** Traditionally, educators have divided the presentation of therapeutic interventions content between therapeutic modalities and exercise-type courses, stressing the intervention's method of application. However, clinicians make decisions based upon the patient's preferred outcome(s) and current impairment(s)/clinical problem(s), while keeping in mind relevant environmental and personal factors. If educators want to present therapeutic intervention curriculum in a manner that mimics how athletic training students will apply this knowledge, then educators should consider organizing content delivery based upon the clinical problems that therapeutic interventions can address. Course construction and content alignment centered on correcting impairments and addressing clinical problems can offer the educator many pedagogical options for fostering critical thinking and reflective practice needed for autonomous clinical practice. In addition, critical thinking and reflective practice may help meet the 2020 CAATE standards that require a patient-centered and evidence-based curriculum. **Description:** Two professional-level master's of athletic training programs have adopted an impairment/clinical problem approach to delivering therapeutic intervention content. In our presentation, we will present how these 2 universities have structured their intervention courses based upon addressing patient impairment(s)/clinical problem(s) rather than method of intervention application. **Clinical Advantage(s):** By organizing therapeutic interventions' content based upon the clinical problems they address, educators may be able to enhance their students' ability to make clinical decisions. It has been the experience of the presenters that encouraging whole, problem-based, patient-centered care is difficult with a traditional content delivery approach; however, a more problem-based approach may offer an opportunity for improving student learning outcomes by better mirroring clinical practice. **Conclusion(s):** With the recent degree changes and new CAATE standards, athletic training programs can use this opportunity to reorganize the delivery of therapeutic interventions content in a way that is more similar to how clinicians practice; thus, educators can better prepare future athletic trainers to provide evidence-based, patient-centered care. **Key Words:** Therapeutic modalities, therapeutic exercise, curriculum design.

8889: Athletic Training Educators' Perceptions of Using Standardized Patients in Teaching

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Context: Standardized patients (SPs) are commonly used in health care education programs to teach and evaluate essential clinical skills. Research has largely focused on the role of SPs in evaluation, but little research has explored the use of SPs as an instructional tool. **Objective:** To explore athletic training educators' perceptions of using SPs as a teaching tool for students enrolled in Commission on Accreditation of Athletic Training Education (CAATE)–accredited professional athletic training programs. **Design:** The emergent design of this qualitative investigation was modeled after the consensual qualitative research approach. A semistructured interview protocol was used to allow for flexibility in accordance with the emergent design. To solicit participants, a purposeful sample of athletic training educators was acquired via snowball sampling. **Setting:** Individual teleconference interviews. **Patients or Other Participants:** 15 athletic training educators (11 women, 4 men) who teach in CAATE-accredited professional athletic training programs and use SPs as a teaching method were included. **Data Collection and Analysis:** We conducted individual interviews, transcribed each, and the data were analyzed and coded into common themes and categories until consensus was achieved by a 4-person research team. Triangulation of the data occurred via the use of multiple researchers and member checking to confirm the accuracy of the data. **Results:** Four themes related to participants' perceptions of SPs as a teaching method: (1) rationale, (2) benefits, (3) challenges, and (4) misconceptions. Participants identified several reasons for using SPs, including a safe environment, increased confidence and decision making, exposure to patient encounters, unique case exposure, and fidelity. Benefits included experience with interpersonal communication, history taking, systematic evaluation/examination, self-reflective practice, and decision making. Participants discussed the experience students were given to communicate with a patient and perform an evaluation while making clinical decisions and reflect on their performance during and following the encounter. However, implementation did not come without challenges, including time, personnel resources, and physical resources. Through the participants' description of their use of SPs, we identified misconceptions about the implementation of teaching SPs. Many participants indicated they selected SPs from among classmates or peers, decreasing the psychological fidelity of the activity. Participants described evaluative SP encounters and not teaching encounters. Participants did not describe encounters where the faculty, student, and even SP interacted when needed for learning purposes throughout the encounter. These misconceptions suggest that teaching SP practices may be misunderstood by athletic training educators. **Conclusions:** These findings highlight the value of SPs as a teaching method. Standardized patient encounters provide participants an opportunity to expose students to various pathologies in a controlled environment, which promotes a learning experience for the student where mistakes can occur with no harm to the patient. Athletic training educators also face challenges in implementing teaching SPs. Standardized patients are a complex teaching and evaluative tool that requires training and education to properly use. Faculty are encouraged to seek out immersive and hands-on workshops to learn how to properly use SPs. **Key Words:** Simulations, essential clinical skills, clinical education.

8897: Exploring Local Health Disparities and the Social Determinants of Health to Develop Interprofessional Values and Ethics Core Competencies

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Context: Athletic training programs are expected to prepare workforce-ready clinicians able to provide patient/population-centered collaborative care that also takes into consideration the social determinants of health. Faculty and administrators should work intentionally to develop a culture supportive of interprofessional education (IPE) and practice. The Interprofessional Education Collaborative (IPEC) Core Competencies can guide

diverse allied health programs in developing shared goals and activities for collaboration, teamwork and the values and ethics of interprofessional care. **Objective(s):** (1) To develop an interprofessional education activity integrating the IPEC Core Competencies, (2) to introduce the International Classification of Functioning, Disability, and Health (ICF) model, (3) to highlight health disparity (HD) data in a local context, and (4) to engage students in critical inquiry through problem solving and patient-centered advocacy. **Background:** A faculty committee from athletic training, nursing, physical therapy, and physician assistant studies has been implementing a strategic plan embedding IPE across curricula over several years. The concern for HDs in the local region and the need to prepare students for addressing structural inequalities was a common need across programs. Working alongside an institutional director of ethical leadership, the committee launched an active-learning IPE series focused on the social determinants of health. **Description:** One course from each discipline in the school was asked to participate, with additional courses and disciplines also invited. The faculty committee identified the required readings and supplemental resources that showcased HD data specific to Cincinnati and the impact of poverty, housing insecurity, education, unemployment, and incarceration rates on health outcomes. A maternal and infant case study was developed using the ICF model. Common lecture materials and online learning tools were also provided in advance. Students and faculty were expected to attend a 2.5-hour event that included a plenary speaker followed by an interprofessional case study discussion and debriefing. **Clinical Advantages:** Overall feedback provided by students and faculty was positive. Small- and large-group discussion centered on students' values and beliefs relative to the work of interprofessional teams in addressing patients' needs. Survey feedback revealed students' preconceived perception of HDs and social determinants of health, personal biases, the impact of one's professional code of ethics on addressing societal issues, and challenges in becoming a clinical leader. Students wanted more time to educate peer professionals about their roles and responsibilities and to develop a plan of care based on the patient case scenario as a team. **Conclusion:** A community-focused forum on quality of life enables students to integrate knowledge about societal issues and one's own role with the interprofessional team with social and professional skills, through small- and large-group facilitated discussions. Although various logistics of the event required fluidity and diligence of those coordinating the forum, the positive feedback from various stakeholders reinforced that such an event can advance student development while also fulfilling a service congruent to the university's mission. **Key Words:** Collaboration, interprofessional education, socioecological model of health, case study education.

8903: Are Athletic Training Preceptors Using Patient-Reported Outcome Measures? A Pilot Study

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Context: Patient-reported outcome measures (PROMs) provide information regarding impairments, function, health, and overall quality of life from the patient's perspective. Typically, questionnaires are used to capture experiences, perceptions, and values from patients. Information gained from PROMs assist clinicians in developing a treatment plan based on the patient's goals. Current literature exists in physical therapy, athletic training, nursing, and physiotherapy regarding the use of PROMs as well as the benefits of and barriers to their use. However, the use of PROMs by health care professionals who serve as both a clinician and a preceptor to athletic training students is absent from the literature. **Objective:** To determine whether athletic training preceptors in a Midwestern state use PROMs, and to determine the perceived benefits and problems with PROM use. **Design:** Cross-sectional. **Setting:** Online questionnaire. **Patients or Other Participants:** Seventy-five preceptors (M/F:32/43; age = 32.41 ± 9.44 years), recruited from 9 professional athletic training programs in a Midwestern state, completed the questionnaire. **Data Collection and Analysis:** Participants completed a previously validated online questionnaire consisting of 86 items split into 2 question sets. Participants who identified using PROMs completed 54 questions regarding the benefits, problems, policies, procedures, and selection requirements of PROM use. Participants not using PROMs completed 32 questions regarding problems with PROM use. Questions regarding benefits and problems were rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The data did not demonstrate normal distribution and represented categorical data. Chi-square tests were used to analyze the data. The α level was $P \leq .05$. **Results:** The majority of responding preceptors (70.7%) do not use PROMs. For those preceptors who use PROMs, there were no significant differences between sex, health care profession, practice setting, or highest degree earned regarding the benefits of or the problems with PROM use ($P \geq .05$). Descriptive analysis of preceptors who use PROMs and those who do not indicates perceived differences regarding problems with PROM use. **Conclusions:** Our results indicate that the majority of athletic training preceptors do not use PROMs in the clinical setting when providing care for patients. Interestingly, the problems with PROM use identified by those preceptors who do not use PROMs are not identified as problems by preceptors who do use PROMs. There seems to be a disconnect between what is perceived as problems with PROM use versus the actual problems of PROMs that were reported by preceptors who use PROMs. Because it appears preceptors are not using PROMs, students are unable to gain experience with PROM use with actual patients. Health care professionals should implement PROMs into their specific clinical setting and identify problems of PROM use. Each health care professional can work toward finding the solution to the most common problems of PROM use related to their clinical setting. **Key Words:** Patient reported outcome measures, athletic training preceptors, benefits, problems.

8904: Fostering Interprofessional Patient-Centered Care Through Standardized Patient Encounters

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Context: Interprofessional education and practice (IPE) is a collaborative approach to learn about, from, and with health care providers to improve collaboration and patient care. Fostering an environment that provides students exposure to collaborative health care promotes the use of a team approach to patient care as a clinician. With an increasing need to recognize, assess, and refer behavioral health conditions in patients, it is imperative to provide students with opportunities for engaging in interprofessional care in a nonthreatening environment. **Objective:** To provide students with a standardized patient experience emphasizing interprofessional patient care with a behavioral health care professional. **Background:**

As athletic training educators strive to provide students with real-time patient encounters and promote the use of interprofessional practice behaviors, educators must seek out meaningful interprofessional simulation experiences. Interprofessional care is necessary for treating our patients; thus, it is imperative to provide students with opportunities to engage in a standardized patient encounter collaborative with another health care provider. These interprofessional patient-centered care encounters allow for continuous professional growth from novice to experienced clinician. **Description:** Professional athletic training students (bachelor's- and master's-level students) engaged in a standardized patient encounter that warranted a referral to a behavioral health professional. Athletic training students had to complete a detailed patient history and physical examination for both the orthopedic condition and the underlying behavioral health concern. After the initial patient evaluation, the athletic training student left the patient to call for a consultation with a behavioral health practitioner for further evaluation, and to collaboratively develop a plan of care for their patient. Prior to reentering the exam room together, the athletic training student debriefed the behavioral health student about the patient and their concerns. After the debriefing, both clinicians reentered the exam room and engaged in interprofessional practice to further evaluate the patient. After the collaborative encounter, the students worked collaboratively to develop a plan of care for their patient. After the patient encounter, students from both disciplines debriefed regarding their patient-centered treatment plan and roles during the patient encounter. **Clinical Advantages:** Students engaged in interprofessional patient-centered care with a health care provider they may encounter during their clinical practice. Students worked collaboratively to learn with, from, and about the other discipline to provide patient-centered care. Students educated each other about the skill sets of each profession and how they can work collaboratively during patient care to improve outcomes for their patients. **Conclusions:** Interprofessional practice is an integral part of patient-centered care. Athletic trainers serve as an integral member of a health care team and exposure not only to interprofessional but to behavioral health encounters allows athletic training students to be competent health care providers upon graduation. **Key Words:** Interprofessional practice, collaborative care, behavioral health.

8905: Using Standardized Patients for Interprofessional Education Experiences with Athletic Training and Social Work Students

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Context: Psychosocial intervention and referral (PIR) is an area in which students do not always gain exposure during their professional education. Standardized patients (SPs) have been used in athletic training to provide realistic educational experiences and can be used in areas in which students gain inadequate clinical experience. Interprofessional education (IPE) experiences between athletic training students (ATSs) and social work students (SWSs) can provide experience with PIR and can encourage collaboration between the 2 disciplines. **Objective:** To describe an SP experience in which ATSs collaborated with SWSs to provide students with evaluation, referral, and collaboration opportunities. **Background:** SPs have been integrated throughout athletic training curriculums to provide realistic patient encounters. SPs increase decision-making skills, confidence, critical thinking, and clinical performance. Students often gain inadequate experience in PIR and do not often collaborate with SWS. Therefore, an IPE experience was developed to encourage collaboration between the 2 health care professions while providing experience in PIR. **Description:** ATSs and SWSs participated in an IPE experience in which each major was trained to be an SP for the other major. Faculty members, 1 AT and 1 SW, designed an SP case related to PIR. Initially, SWSs were trained to portray a patient who suffered from depression during postoperative rehabilitation. All trainings were completed by the 2 faculty members. The SP reported to the athletic training facility for rehabilitation, where the ATSs evaluated the SP in pairs and developed a plan of care, which included appropriate referral and collaboration with a school counselor (social worker), in addition to the team physician. Following the encounter, faculty members debriefed with the ATSs and SWSs. Debriefing provided opportunities to discuss feelings, challenges, triumphs, and ways to collaborate. SWSs were given the opportunity to provide feedback based on their experience as the patient (eg, how did the clinician make them feel, did the clinician develop and educate the patient on a plan of care). The ATSs were then trained to portray the same patient after the patient had been referred to the school counselor. The ATSs participated in a motivational interviewing session conducted by SWSs. This allowed the ATSs to experience a counseling session, while providing the SWSs the opportunity to conduct interviews in a safe environment. After the encounters, students submitted an intervention portfolio, which included documentation for their evaluation and a reflection. **Clinical Advantage(s):** Training SWSs to portray a patient allowed collaboration between the 2 members of the health care team. The students demonstrated a greater understanding of each other's profession and discovered opportunities for collaboration. Additionally, because of the knowledge of the SWSs, they were able to provide a unique perspective during debriefing. ATSs gained the opportunity to experience a counseling session, which provided greater understanding of the process. **Conclusion(s):** SPs provide worthwhile educational experiences in areas in which students may not gain clinical experience, such as with PIR. IPE experiences that involve students from multiple disciplines are an inexpensive way to use SPs while providing a worthwhile experience. **Key Words:** Psychosocial intervention and referral, counseling, interprofessional practice.

8921: Influences the Preceptor/Student Relationship Has on Engagement in Clinical Education

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Context: The athletic training education literature supports the use of pedagogical approaches and instructional strategies that use engagement as a way to facilitate learning. However, the majority of evidence is witnessed in didactic education, placing less emphasis on clinical education. Examination of engagement in clinical education is needed to determine if engagement can assist with enhancing students' clinical education experiences. **Objective:** To explore the role of engagement in athletic training clinical education. **Design:** Qualitative case study. **Setting:** One Midwest undergraduate athletic training program. **Patients or Other Participants:** Seven preceptors and 7 students (4 juniors and 3 seniors) who equally represented various clinical education sites (ie, college athletics, rehabilitation clinics, and high schools)

participated in the study. Convenient sampling was used for ease of accessibility to research context. **Data Collection and Analysis:** Data collection involved 2 interviews (initial and follow-up) and 2 observations per participant. All forms of data were collected by handwritten field notes and audio recordings of interviews. Data analysis stemmed from Strauss and Strauss & Corbin's grounded theory approach and occurred throughout and after data collection. Data were triangulated to corroborate evidence by comparing and contrasting data from preceptors' and students' perspectives, interviews, and observations. **Results:** To better understand engagement, participants were asked to identify factors that promote or hinder engagement in clinical education. Data analysis of various factors revealed a correlation to the preceptor/student relationship. In particular, feeling comfortable and having trust were recognized to have the greatest impact on engagement in clinical education. Feeling comfortable and having trust were found to increase opportunities for learning and engagement. Participants stated that feeling comfortable allowed the individual to become associated with the other person, which made them more inclined to initiate and provided more opportunities for learning. Trust was interpreted as competence, meaning when a student demonstrated competence trust was achieved. Trust was found to increase opportunities by providing learning experiences with deeper engagement. Specifically, trust allowed for supervised autonomy, which was classified as a learning experience with the deepest engagement because it included independence, critical thinking, decision making, and complex cognitive processing. Feeling comfortable and trust were also recognized to hinder engagement in clinical education. In particular, not feeling comfortable and a lack of trust limited engagement by not allowing hands-on skills, discussion, and supervised autonomy to occur. **Conclusions:** The findings of the current study revealed the preceptor/student relationship to have the greatest influence on engagement in clinical education, thus exposing the impact preceptor/student placement has on clinical education experiences. The findings emphasize the need to determine clinical placement based on preceptor/student relationship since it was found to promote and hinder engagement in clinical education. Additional research in this area could also assist program directors and clinical education coordinators with student clinical placements by providing characteristics that determine a good preceptor/student match/fit. **Key Words:** Engagement, clinical education, preceptor/student relationship, comfort, trust.

8923: Simulated Learning Best Practices Within Athletic Training to Support Self-Efficacy Theory

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Context: Simulated learning environments have become more widespread within health care curricula. There is often a disconnect between the implementation of simulation experiences and the use of simulation best practices that facilitate learner and programmatic success. Many faculty implement simulation activities without thoroughly considering the cognitive factors the learner undertakes within the learning environment. Consideration of self-efficacy theory (SET) within simulated learning could assist with learner success and programmatic development, fostering clinical and communication skills. **Objective:** To describe simulation best practices within athletic training and how the use of simulation supports the processes of SET. **Background:** Simulated learning experiences have proven successful in a variety of health care curricula. The implementation of simulation needs to be purposeful and planned. Simulation is often used in the classroom/learning environment for learning purposes prior to being used for evaluation. Several physical and cognitive factors related to the learner and learning environment should be considered when developing and implementing simulation experiences. **Description:** SET is characterized by a learner's perceived ability in performing a desired skill set, such as communicating with a patient, and facilitation of those skills in future encounters. The physical and cognitive processes undertaken by a learner in simulated experiences should be a stepwise progression from simple (ie, evaluate a patient with a musculoskeletal injury) to more complex tasks (ie, communicate effectively with a patient and/or with another health care provider regarding a treatment plan), which better prepares learners for actual patient care. Additionally, stepwise progression accounts for the cognitive load (multiple internal cognitive processes) of the learner and should be considered when creating simulations as to not overwhelm the learner. Research suggests modeling and reinforcement from verbal and nonverbal feedback provided to learners promotes self-reflection. Through simulation, educators can effectively use modeling to familiarize learners with the learning environment, thus fostering acquisition and development of clinical and communication skills necessary for adequate patient care and successful learning outcomes. As learners are encouraged to self-reflect and vocalize experiences with others, the physiological and affective states within learners are materialized. Self-reflection helps learners develop their own self-efficacy. **Clinical Advantages:** Simulation provides a learning environment that fosters the acquisition of skills and, with repetition, mastery through cognitive and affective processes inherent to human interaction. All of these processes are key concepts relative to SET. It is important for educators to recognize and facilitate the cognitive processes that learners are undertaking when introducing them to a simulated learning environment in order to have successful skill acquisition and ultimately prepare them to be autonomous practitioners. **Conclusions:** The cognitive load of the learner needs to be considered when implementing simulation. Simulations should be planned in a strategic manner in order to facilitate the affective processes of the learner and lead to positive outcomes. The processes within SET should be recognized as cognitive processes inherent to a learner during skill acquisition desired from simulations. These processes should further be recognized as key factors driving a learner's desire to learn new skills and/or develop existing skills. **Key Words:** Simulation, cognitive load, skill acquisition, modeling.

8925: A Snapshot of Cultural Competence Education in Undergraduate Athletic Training Programs

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Context: The Commission on Accreditation of Athletic Training Education requires that all athletic training programs must teach cultural competence; however, programs have the autonomy to determine how and when this content is delivered. In addition, the current original research examining athletic training and cultural competence is very limited and there is a lack of research focused on the educational practices of teaching cultural competence in athletic training. **Objective:**

To investigate how cultural competence is being taught in undergraduate athletic training programs and the challenges educators face when implementing a cultural competence curriculum. **Design:** Mixed methods. **Setting:** Electronic survey, follow-up telephone interview. **Patients or Other Participants:** Electronic survey, 64 undergraduate athletic training program educators. Follow-up telephone interview, 4 electronic survey respondents. **Data Collection and Analysis:** The electronic survey was delivered through Qualtrics and the data analysis included frequencies, mean, mode, standard deviation, frequency distribution comparison, and χ^2. The follow-up telephone interviews were conducted and recorded by the researcher, and the data analysis process included transcription, coding, summarization, and thematic analysis. **Results:** The elements used to design cultural competence curriculum, such as the culture of the institution, formal definitions, and theory, varied across the respondents. Cultural competence was often taught in noninterdisciplinary courses (85.9%, n = 55), during years 3 (67.2%, n = 43) and 4 (60.9%, n = 39), yet an extensive list of topics was addressed. This content was most frequently being taught by 1 (42.2%, n = 27) or 2 (37.5%, n = 24) educators employed by the athletic training department/program (81.3%, n = 52). The majority of the educators were white or Caucasian (75.0%, n = 48), and they often prepared for teaching cultural competence through informal instruction and experience (70.3%, n = 45). In the clinical setting, no institution surveyed required a study-abroad experience, but some of the programs (23.4%, n = 15) intentionally placed their students at clinical experiences in a diverse setting. The programs that faced challenges when delivering cultural competence education cited the following obstacles: finding room in the curriculum and teaching it across the program, securing qualified educators, continuing education opportunities and training, a lack of research and resources specific to athletic training, sensitivity and resistance to the subject matter, and clinical reinforcement. **Conclusions:** The results of this research study indicate that athletic training programs are attempting to teach cultural competence thoroughly, but there are several areas in need of improvement. Athletic training educators need more opportunities for formal training in cultural competence, focused on incorporating interprofessional education, using theory to inform practice, adapting to various influences, topics to address, effective delivery modes, and successful classroom exercises. In addition, athletic training programs need to reexamine how to infuse cultural competence across the entire program and increase patient encounters in diverse settings. It is suggested that accreditation requirements should better address the necessity and complexity of cultural competence education. **Key Words:** Athletic training, cultural competence, education.

8902: Athletic Training Student Application of Evidence-Based Practice During Clinical Education: A Report from the Athletic Training Clinical Education Network

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Context: Previous research has demonstrated that the translation of evidence-based practice (EBP) from didactic environments to clinical practice can be difficult. The level to which athletic training students (ATSs) incorporate EBP during clinical experiences is still largely unknown. **Objective:** To assess whether ATSs are integrating concepts of EBP during patient encounters (PEs) as a part of their clinical experiences. **Design:** Multisite, panel design. **Setting:** Three Commission on Accreditation of Athletic Training Education–accredited professional athletic training programs (2 baccalaureate, 1 postbaccalaureate). **Patients or Other Participants:** One thousand three hundred nineteen PEs (539 pediatric patients, 775 adult patients, 5 missing) were entered by 58 ATSs (39 females, 18 males, 1 missing) at 53 clinical sites (28 college/university, 25 secondary school). **Data Collection and Analysis:** ATSs underwent formal training by the research team. ATSs used E*Value software to track PEs during their clinical experiences in the 2018 spring semester. Variables collected per PE included student role (observed, assisted, performed), setting (college/university, secondary school), and body region of diagnosis (upper extremity, lower extremity, head/face, trunk, general medical, nonspecific). ATSs were also asked to report if 3 defined components of EBP occurred during each PE. Descriptive statistics were used to summarize characteristics of the PEs. Chi-square tests, pair-wise comparisons with Bonferroni corrections, and Mann-Whitney U tests ($P < .05$) were used to assess group differences. Phi correlations were used to estimate the strength of relationships between the inclusion of components of core competencies during PEs. **Results:** ATSs reported they asked a question of a clinician, including their preceptor, during 18.3% of encounters (242/1319), searched for any available evidence during 3.6% of encounters (48/1319), and applied evidence previously learned during 45.2% of encounters (596/1319). They reported they did not include concepts of EBP during 45.1% of patient encounters (595/1319). ATSs reported the use of EBP more frequently if the encounter occurred in the collegiate setting (66%) than the high school setting (38.8%, $P < .01$). There were no significant differences by body region regarding the use of EBP ($P = .39$). ATSs reported the use of EBP more frequently when they assisted with the encounter (70.8%) or performed the encounter (55.4%, $P < .01$) than when they observed the encounter (46.6%). There were positive, weak correlations between the use of EBP and most other core competencies. ATSs who reported the use of EBP during a patient encounter also tended to report the use of health information technology ($\Phi = 0.23$, $P < .01$), interprofessional education ($\Phi = 0.29$, $P < .01$), and quality improvement ($\Phi = 0.45$, $P < .01$). There was also a positive, moderate correlation between the use of EBP and patient-centered care ($\Phi = 0.62$, $P < .01$). **Conclusions:** Inclusion of components of EBP occurred in more than half of reported PEs; however, ATSs are relying on evidence from previous experience. ATSs may need to be encouraged to seek anecdotal evidence from peers as they enter clinical practice and to continue to seek evidence as it becomes available. Relying on evidence the ATS has learned supports the concept that programs and preceptors must be apprised of current trends. **Key Words:** Patient-centered care, patient encounters, core competencies. *Funded by the National Athletic Trainers' Association Research and Education Foundation.*

8893: Athletic Training Student Application of Health Information Technology During Clinical Education: A Report from the Athletic Training Clinical Education Network

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Context: Health information technology (HIT) is becoming ubiquitous in health care, so it is essential to ensure professional athletic training students (ATSs) are gaining exposure to the concepts of HIT throughout their clinical experiences. Research has demonstrated that when ATSs observe patient encounters (PEs) they are less likely to implement HIT; however, it is still unclear how or to what extent ATSs are incorporating concepts of HIT during individual PEs. **Objective:** To assess whether ATSs are integrating concepts of HIT during PEs as part of their clinical experiences. **Design:** Multisite, panel design. **Setting:** Convenience sample of 3 Commission on Accreditation of Athletic Training Education–accredited professional athletic training programs (2 baccalaureate, 1 postbaccalaureate). **Patients or Other Participants:** Fifty-eight ATSs (39 females, 18 males, 1 missing) at 53 clinical sites (28 college/university, 25 secondary school) entered 1319 PEs (539 pediatric patients, 775 adult patients, 5 missing). **Data Collection and Analysis:** Following a formal training session by the research team, ATSs used E*Value software to track PEs during their clinical experiences in the 2018 spring semester. Variables collected per PE included student role (observed, assisted, performed), setting (college/university, secondary school), and body region of diagnosis (upper extremity, lower extremity, head/face, trunk, general medical, nonspecific). Athletic training students were also asked to report if 2 components of HIT occurred during each PE. Descriptive statistics were used to summarize characteristics of the PEs. Chi-square tests, pairwise comparisons with Bonferroni corrections, and Mann-Whitney U tests ($P < .05$) were used to assess group differences. Phi correlations (Φ) were used to estimate the strength of relationships between the inclusion of components of core competencies during PEs. **Results:** During PEs, ATSs reported they documented information obtained from the encounter in an electronic health record (EHR) or electronic medical record (EMR) during 19.7% of encounters (260 of 1319). However, they reported they used information from the EHR/EMR to assist with clinical decision making during only 4.5% of PEs (60 of 1319). Athletic training students reported they did not include the concepts of HIT during 77.1% of PEs (1017 of 1319). They reported the use of HIT more frequently if the encounter occurred in the collegiate setting (33.8%) than the high school setting (7.1%, $P < .01$). There were no significant differences by body region ($P = .45$) or student role ($P = .70$) regarding the use of HIT. There were positive, weak correlations between the use of HIT and other core competencies. Athletic training students who reported the use of HIT during a PE also tended to report the use of patient-centered care ($\Phi = .36$, $P < .01$), interprofessional education ($\Phi = .29$, $P < .01$), evidence-based practice ($\Phi = .23$, $P < .01$), and quality improvement ($\Phi = .36$, $P < .01$). **Conclusions:** Components of HIT are being incorporated in only about a quarter of PEs that occur during clinical experiences, and are more likely to be included in PEs that occur at the collegiate setting. Programs should emphasize the importance of HIT to ensure athletic training students are gaining experience completing high-quality patient care documentation via an EHR/EMR and using real-time patient data to inform their clinical decisions. **Key Words:** Electronic medical records, patient encounters, core competencies.

Funded by the National Athletic Trainers' Association Research and Education Foundation.

8892: Athletic Training Student Application of Interprofessional Education During Clinical Education: A Report from the Athletic Training Clinical Education Network

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Context: Past research has identified interprofessional education (IPE) as a challenging core competency to incorporate into health care education, and suggested that the lack of IPE is a barrier to students' ability to provide patient-centered care. The extent to which IPE is being incorporated into athletic training clinical experiences for athletic training students (ATSs) is still largely unknown. **Objective:** To assess whether ATSs are integrating concepts of IPE during patient encounters (PEs) during their clinical education. **Design:** Multisite, panel design. **Setting:** Three Commission on Accreditation of Athletic Training Education–accredited professional athletic training programs (2 baccalaureate, 1 postbaccalaureate) via convenience sampling. **Patients or Other Participants:** Fifty-eight ATSs (39 females, 18 males, 1 missing) at 53 clinical sites (28 college/university, 25 secondary school) entered 1319 PEs (539 pediatric patients, 775 adult patients, 5 missing). **Data Collection and Analysis:** Athletic training students used E*Value software to track PEs during their clinical experiences in the 2018 spring semester. Variables collected per PE included student role (observed, assisted, performed), setting (college/university, secondary school), and body region of diagnosis (upper extremity, lower extremity, head/face, trunk, general medical, nonspecific). Athletic training students were also asked to report if 3 defined components of IPE occurred during each PE. Descriptive statistics were used to describe overall characteristics of the PEs. Chi-square tests, pairwise comparisons with Bonferroni corrections, and Mann-Whitney U tests ($P < .05$) were used to assess group differences. Phi correlations (Φ) were used to estimate the strength of relationships between the inclusion of components of core competencies during PEs. **Results:** Athletic training students reported that they interacted with another athletic trainer besides their preceptor during 8.2% of encounters (108 of 1319), interacted with another health care professional outside of athletic training besides their preceptor during 3.9% of encounters (51 of 1319), and interacted with another learner besides an ATS during 3.6% of encounters (48 of 1319). Athletic training students reported they did not include concepts of IPE during 87% of PEs (1147 of 1319). They reported the use of IPE more frequently if the encounter occurred in the collegiate setting (21.4%) as compared to the high school setting (0.9%), $P < .01$. Athletic training students reported the use of IPE more frequently if the patient was diagnosed with a head/face injury (29.2%) than an upper extremity injury (8.0%, $P = .02$). They reported the use of IPE more frequently when they observed the encounter (20.5%) than when they performed the encounter (10.9%, $P < .01$). There were positive, weak correlations between the use of IPE and the other core competencies. Athletic training students who reported the use of IPE during a PE also reported the use of health information technology ($\Phi = .28$, $P < .01$), patient-

centered care (Φ=.30, $P < .01$), evidence-based practice (Φ = .29, $P < .01$), and quality improvement (Φ = .20, $P < .01$). **Conclusions:** Athletic training students don't appear to be interacting with other health care providers during their clinical experiences. Programs should ensure that these interactions occur to develop ATSs' team-building and communication skills and prepare them to engage in interprofessional practice. Consistent with past research, IPE continues to be the most challenging core competency to incorporate into athletic training clinical experiences. **Key Words:** Interprofessional practice, patient encounters, core competencies. *Funded by the National Athletic Trainers' Association Research and Education Foundation.*

8890: Athletic Training Student Application of Patient-Centered Care During Clinical Education: A Report from the Athletic Training Clinical Education Network

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Context: Patient-centered care (PCC) is the most frequently implemented core competency by students in health care education programs, and is more likely to be included when students and preceptors are jointly treating patients during clinical education. However, past research has examined only self-identification of implementation, not the inclusion of components of the competency during patient encounters (PEs). **Objective:** To assess whether athletic training students (ATSs) are integrating concepts of PCC during PEs as a part of their clinical education experiences. **Design:** Multisite, panel design. **Setting:** Three Commission on Accreditation of Athletic Training Education–accredited professional athletic training programs (2 baccalaureate, 1 postbaccalaureate). **Patients or Other Participants:** One thousand three hundred nineteen PEs (539 pediatric patients, 775 adult patients, 5 missing) recorded by 58 ATSs (39 females, 18 males, 1 missing) at 53 clinical sites (28 college/university, 25 secondary school). **Data Collection and Analysis:** Athletic training students used E*Value software to track PEs during their clinical experiences in the 2018 spring semester. Variables collected per PE included student role (observed, assisted, performed), setting (college/university, secondary school), and body region of diagnosis (upper extremity, lower extremity, head/face, trunk, general medical, nonspecific). Athletic training students were asked to report if 3 defined components of PCC occurred during each PE. Descriptive statistics were used to summarize characteristics of the PEs. Chi-square tests, pairwise comparisons with Bonferroni corrections, and Mann-Whitney U tests ($P < .05$) were used to assess group differences. Phi correlations (Φ) were used to estimate the strength of relationships between the inclusion of components of core competencies during PEs. **Results:** Athletic training students reported they discussed goals with the patient during 25.5% of encounters (336 of 1319), collected information through patient-reported outcome (PRO) measures during 24.3% of encounters (321 of 1319), but collected clinician-reported outcome (CRO) measures during only 4.2% of encounters (56 of 1319). Athletic training students reported they did not include concepts of PCC during 57.2% of PEs (754 of 1319). Athletic training students' use of PCC occurred more frequently in the collegiate setting (52.3%) than the high school setting (29.1%), $P < .01$. There were no significant differences by body region regarding the use of PCC ($P = .25$). Athletic training students used PCC more frequently when they assisted with (50.6%, $P = .01$) or performed (44.2%) the PE as compared to observing the encounter (34.2%). There were positive, weak correlations between the use of PCC and most other core competency components. Athletic training students who reported the use of PCC during a PE also reported the use of health information technology (Φ = .36, $P < .01$), interprofessional education (Φ = .30, $P < .01$), and quality improvement (Φ = .37, $P < .01$). There was a positive, moderate correlation between the use of PCC and evidence-based practice (Φ = .62, $P < .01$). **Conclusions:** Athletic training students reported incorporating components of PCC for less than half of the PEs occurring during clinical education; the most commonly included components were discussion of patient goals and collection of PROs. Program faculty and preceptors should make a concerted effort to educate ATSs on the importance of CROs, a mechanism vital to identifying impairments, and seek to provide ATSs the opportunity to collect CROs as a component of PCC during clinical education. **Key Words:** Evidence-based practice, patient encounters, core competencies. *Funded by the National Athletic Trainers' Association Research and Education Foundation.*

8917: Athletic Training Student Application of Quality Improvement During Clinical Education: A Report from the Athletic Training Clinical Education Network

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Context: A component of quality improvement (QI) is the ability to reflect on the effectiveness of one's practice. Past research has demonstrated that QI is more frequently implemented in patient encounters (PEs) in which athletic training students (ATSs) are assisting the preceptor. As one of the core competencies, QI will be a required curricular content component in all professional athletic training programs in 2020. **Objective:** To assess whether ATSs are integrating concepts of QI during PEs as a part of their clinical experiences. **Design:** Multisite, panel design. **Setting:** Three Commission on Accreditation of Athletic Training Education–accredited professional athletic training programs (2 baccalaureate, 1 postbaccalaureate) via convenience sampling. **Patients or Other Participants:** Fifty-eight ATSs (39 females, 18 males, 1 missing) entered 1319 PEs (539 pediatric patients, 775 adult patients, 5 missing) at 53 clinical sites (28 college/university, 25 secondary school). **Data Collection and Analysis:** ATSs used E*Value software to track PEs during their clinical experiences in the 2018 spring semester. ATSs were asked to report whether, as a result of the PE, they reflected on their experience to identify potential areas for improvement and success. Other variables collected per PE included student role (observed, assisted, performed), setting (college/university, secondary school), body region of diagnosis (upper extremity, lower extremity, head/face, trunk, general medical, nonspecific). Descriptive statistics were used to summarize characteristics of the PEs. Chi-square tests, pair-wise comparisons with Bonferroni corrections, and Mann Whitney U tests ($P <$ .05) were used to assess group differences. Phi correlations (Φ)

were used to estimate the strength of relationships between the inclusion of components of core competencies during PEs. **Results:** ATSs reported they reflected on their experience to identify areas for improvement and successes after 47% of PEs (620/1319). ATSs reported the use of QI more frequently if the encounter occurred in the collegiate setting (54.6%) as compared with the high school setting (36.2%, $P < .01$). There were no significant differences by body region ($P = .48$) regarding the use of QI. ATSs reported the use of QI more frequently when they assisted with the encounter (60.7%) as compared with when they performed the encounter (45.9%, $P = .03$). There were positive, weak correlations between the use of QI and the other core competencies. ATSs who reported the use of QI during a PE also reported the use of patient-centered care ($\Phi = 0.37$, $P < .01$), interprofessional education ($\Phi = 0.20$, $P < .01$), evidence-based practice ($\Phi = 0.45$, $P < .01$), and health information technology ($\Phi = 0.36$, $P < .01$). **Conclusions:** Inclusion of QI by ATSs in clinical experiences occurred in less than half of reported PEs, and was most likely to be included in PEs that occurred at the collegiate setting during which the ATS assisted the preceptor. Faculty and preceptors should be encouraging ATSs to reflect on the effectiveness of their practice during clinical education. QI is most frequently implemented during PEs in which the ATS assists the preceptor, so the preceptor's understanding and use of QI is vital to the ATS adopting the practice. **Key Words:** Continuous quality improvement, patient encounters, core competencies. *Funded by the National Athletic Trainers' Association Research and Education Foundation.*