Exertional Rhabdomyolysis and Exertional Collapse Associated with Sickle Cell Trait
Exertional rhabdomyolysis and exertional collapse associated with sickle cell trait (ECAST) are syndromes that are independent and intertwined. Excess in training, especially involving novel exercise, is the causative factor for exertional rhabdomyolysis. For the athlete with sickle cell trait, fulminant rhabdomyolysis is a grave complication that can trigger a metabolic cascade culminating in death. Out-of-season ‘performance enhancement’ sessions lacking principles of physiology and sport specificity in their planning create risk of rhabdomyolysis in participant athletes and ECAST in those athletes with sickle cell trait.

At the conclusion of this session, attendees will be able to:
1. Identify components of exertion that may predispose to exertional rhabdomyolysis
2. Recognize ECAST versus other common exertional collapse syndromes
3. Understand and adopt strategies to prevent ECAST and exertional rhabdomyolysis

Emotional Intelligence and Developing Your Leadership Potential

Fascial Counterstrain, A New Evaluation and Treatment Approach to Reduce Inflammation, Muscle Spasm, and Pain
Fascial Counterstrain is a recently developed hands-on evaluation and treatment technique to reduce inflammation, muscle spasm, and pain. Harvard Medical school held the First World Fascial Congress in 2006, where research was presented that radically changed all previous conceptions of what fascia is and its’ role in painful conditions. This evidence has led to an efficient and effective manual technique to treat fascial dysfunction anywhere in the body. Pictorial and video evidence of the effectiveness of Fascial Counterstrain is included in the presentation.

At the conclusion of this session, attendees will be able to:
1. Describe the history of the development of Fascial Counterstrain, and the research, which guided that development.
2. Provide a summary explanation of how Fascial Counterstrain works.
3. Compare and contrast direct manual technique to Indirect manual technique.

Recognition, Evaluation and Management of Triangular Fibrocartilage Injuries
Vague ulnar-sided wrist pain is a common complaint of athletes after falling on an outstretched arm or after repetitive activities which is commonly mistaking for a sprain resulting in a chronic condition ultimately diagnosed as Triangular Fibrocartilage Complex (TFCC) injury. When gathering the history of TFCC injury from an athlete or patient it is often vague at best. Diagnosis of TFCC requires systematic evaluation approach combining clinical and diagnostic tests coupled with the given history. Management of TFCC injury ranges from conservative treatment including immobilization and slow rehabilitation progression, surgical treatment that may include debridement or peripheral repair, or plasma rich injections.

At the conclusion of this session, attendees will be able to:
1. Identify components of the Triangular Fibrocartilage (TFCC) and predisposing factors of TFCC injury.
2. Identify appropriate clinical and diagnostic tests for TFCC injury.
3. Plan appropriate management of TFCC injury.

The Role of Mobile Technology within the Assessment of Concussion
Concussion evaluations often rely on subjective clinical techniques such as self-reported symptoms. Objective quantification of post-concussion deficits improves reliability and reduces examiner bias. Objective testing methods, however, are most often limited to laboratory settings as financial, personnel, and space limitations prohibit routine clinical use. Technological developments now allow athletic trainers to potentially utilize objective tests during serial concussion recovery evaluations. Specifically, the use of portable tablets to evaluate neurocognitive function and inertial sensors embedded within a smartphone to evaluate gait and balance control will be discussed as promising ways to improve practicality and objectivity during post-concussion evaluations.

At the conclusion of this session, attendees will be able to:
1. Compare existing concussion tests to recently developed, technologically based tests.
2. Evaluate how different forms of subjective or objective tests can assist with clinical decision-making.
3. Interpret the literature that has reported outcome measures related to return-to-play testing procedures and long-term effects following a concussion.

New Landscapes of Healthcare: The Intersection of Cost-Containment and Reimbursement in Athletic Training
The profession of athletic training continues to expand, mature, and evolve. Some of this growth has been organic and driven by the needs of our healthcare system. Other growth has been driven by the advocacy efforts of the NATA and its membership. This forward looking presentation will explore the reasons to support expansion of athletic training into many domains. It will focus upon the benefits of emphasizing the positive cost containment abilities that athletic trainers possess, but also discuss why directed advocacy efforts focused upon recognition and reimbursement by payors for compliantly delivered services will ultimately benefit the profession overall.

At the conclusion of this session, attendees will be able to:
1. Comprehend internal and external reasons that have impact the growth of the profession into new domains.
2. Gain knowledge specific to the efforts of the NATA in advancing insurance recognition and the utilization of athletic trainers by employers as reimbursable providers in compliant capacities.
3. Develop an appreciation for the need of the profession to grow and evolve as the healthcare landscape changes.

Post-Concussion Sleep Disturbances Throughout Concussion Recovery
Sleep is necessary in the maintenance of cognitive functions and may serve as a key factor in brain injury recovery. Up to 70% of concussed individuals report sleep disturbances and daytime sleepiness, but
sleep is not commonly managed post-injury. This may be an important missing piece in concussion management, since abnormalities in sleep components such as duration, quality, and efficiency may negatively impact symptoms, cognition, and balance post-injury. Understanding associations between sleep and recovery could have a significant impact on clinical management as sleep is not accounted for in current assessment batteries, and may be a critical variable in treatment.

At the conclusion of this session, attendees will be able to:
1. Recognize the importance of sleep in healthy individuals and analyze the prevalence of sleep disturbances and daytime sleepiness following concussion.
2. Identify common subjective and objective measures used to assess sleep in concussed individuals.
3. Assess current literature detailing sleep disturbances post-concussion and interpret how findings are being utilized in clinical management.

Dance Performance: Articulate Your Landing
Dancers have demonstrated “soft” landing strategies, which are thought to decrease the incidence of traumatic lower extremity injuries. Research has theorized the potential reasons include controlled toe to heel landing techniques, a more neutral alignment during jumping tasks, improved balance ability, and years of visual feedback. This session will specifically examine the role of articulating through the foot and ankle in “soft” landings demonstrated by dancers. As well as examine the implications of articulating through the foot and ankle on dance performance measures and injury risk.

At the conclusion of this session, attendees will be able to:
1. Identify differences in landing strategies between female dancers and athletes
2. Describe the biomechanics of landing strategies in dancers
3. Illustrate the role of the foot and ankle in dissipating forces while landing

Dealing with the Opioid Epidemic: A Sports Perspective
The United States is in the throws of an opioid epidemic. People are dying of overdoses at an alarming rate. It has surpassed motor vehicle collision as the leading cause of accidental death. How can we minimize the use and abuse of opioids? What lessons can Sports teach our youth to not use.

At the conclusion of this session, attendees will be able to:
1. Recognize the signs and symptoms of opioid misuse or withdrawal
2. Address concerns of opioid misuse
3. Identify an opioid misuse, what to do next
attributed to an underlying cause, with diabetes being a significant risk factor. Patients will progress through four stages of the condition over 18-42 months. Conservative treatments include NSAIDs, corticosteroid injections and physical therapy focusing on end-range stretching. Manipulation and capsular release may be recommended for those patients in a prolonged frozen stage.

At the conclusion of this session, attendees will be able to:
1. Identify the characteristics of adhesive capsulitis and appreciate the natural progression of the condition.
2. Differentiate adhesive capsulitis from other shoulder disorders by utilizing both clinical examination and advanced diagnostic techniques.

Vitamin D and It's Impact on Health, Athletic Performance and Recovery
Vitamin D deficiency and the resulting effect on bone health is well established. However, mounting evidence also exists that may point to performance related impacts for high level athletes. In addition to health outcomes, this session aims to take a critical look at how vitamin D assessment can and should fit into performance management and nutrition support protocols. Current data on musculoskeletal strength and recovery will be reviewed as well as evaluation considerations for applied practice.

At the conclusion of this session, attendees will be able to:
1. Describe the potential health & performance impacts of suboptimal vitamin D levels
2. Recognize teams and/or athletes who may benefit from vitamin D assessment
3. Use current data on vitamin D status to consider evaluation strategies within your practice

Joint Decisions: Marijuana, Sports, and the Legalized Landscape
This session will cover the changing landscape of cannabis use as a result of legalization. The data from states with recreational marijuana laws will serve as a guide when detailing the impact on athletic and mental performance. Due to the controversial nature of cannabis in sport, presenters will also touch upon drug testing policies related to marijuana and highlight differences between sports organizations and levels of competition. Attendees will leave the presentation with greater knowledge of how marijuana affects athletic performance, as well as recommendations for addressing marijuana use with athletes.

At the conclusion of this session, attendees will be able to:
1. Recognize how recreational marijuana has impacted public health measures in legalized states.
2. Summarize the differences in drug-testing policies related to marijuana between multiple sport organizations and levels of competition.
3. Describe the effects of marijuana on athletic performance outcomes and general athlete health and well-being.
Pathomechanics of Foot Pain in Distance Runners: Apophysitis to Stress Fractures

Foot injuries are common in runners, and their biomechanical derivations are often misunderstood. During this session, the presenter will provide an in-depth description of common running-related foot injuries and the faulty biomechanics associated with each. Attendees will improve their understanding of the etiology of running-related foot injuries such as calcaneal apophysitis, Achilles tendonopathy, metatarsal stress fractures, and others, in order to enhance assessment and treatment skills. The session will incorporate video to demonstrate selected pathomechanics.

At the conclusion of this session, attendees will be able to:
1. Describe the tissue mechanics associated with selected running-related foot injuries.
2. Identity normal lower extremity running biomechanics.
3. Distinguish between normal and abnormal lower extremity running biomechanics using video analysis.

Emergency Planning: Looking at the Implications of Readiness Across the United States and Particularly Rural States

The purpose of this presentation is to review results of research that has been done that addresses emergency readiness at high schools across the United States and in one rural state. Attendees will be presented with areas of weaknesses in schools and communities to respond to athletic emergency situations particularly in the rural setting. Attendees will be provided with current recommendations for a variety of emergency conditions that may present during at high school practices and events. Implementation strategies related to current recommendations & best practices for comprehensive Emergency Action Plans will also be discussed.

At the conclusion of this session, attendees will be able to:
1. Identify components of an Emergency Action Plan for athletic practices and events.
2. Recognize gaps emergency readiness for athletics practices and events.
3. Discuss research that identifies areas of weakness when constructing an Emergency Action Plan.

Kids in Crisis: The Secondary School Athletic Trainer’s Role in Mental Health

Mental health situations often appear in secondary school athletes due to both internal and external influences. Abuse, addiction, depression and anxiety are common concerns, and can stem from problems at home, pressures of school or sport, and peer relationships. Vulnerable athletes may bring such concerns to the AT, and perhaps outside of regular school hours. Determining the appropriate actions, within the AT’s scope, can have a dramatic impact on that child’s future. This presentation will help delineate when and how an AT can help a secondary school athlete experiencing a mental health issue or crisis.

At the conclusion of this session, attendees will be able to:
1. Describe the secondary school athletic trainer’s role in mental health/illness care
2. Identify emergency and non-emergency mental health situations
3. Develop and apply an emergency action plan for appropriate interventions
Athletic Groin Pain: Making Sense of Pathology and Enhancing the Clinical Approach
There are currently over 30 known diagnostic labels for athletic groin pain. While there have been concensus statements recently published, even these use different classification systems for pathologies. How is the practicing athletic trainer to make sense of the evidence to make appropriate clinical decisions? This presentation will provide a review of relevant pathology in light of current evidence, considerations for timing and interpretation of imaging, and insight into biomechanical and functional movement considerations.

At the conclusion of this session, attendees will be able to:
1. Gain comprehension of different pathological entities within athletic groin pain
2. Apply the pathology definitions and features to the patient’s clinical presentation.
3. Analyze radiographic studies to assess for the presence of articular hip pathology.

Pelvic Floor Dysfunction in the Athletic Population
The pelvic floor is starting to receive more attention, but too often the assumption is that the muscles are weak due to hypoactivity. Pelvic floor muscle dysfunction, which can affect hip stability, core activation, neural tension and bowel, bladder and sexual function, is actually commonly due to muscle shortening and hyperactivity. If this is the case, could kegels be making the problem worse? If so, what can athletic trainers do? Fortunately, there are several common underlying drivers for pelvic floor muscle overactivity that can be easily assessed and treated.

At the conclusion of this session, attendees will be able to:
1. Differentiate between pelvic floor muscle hypoactivity and hyperactivity based on patient history and examination.
3. Devise comprehensive and appropriate plan of care for the athlete with pelvic floor muscle involvement

Nutrition and Dietary Supplement Habits of High School Athletes: Strategies to Solve the Complex Puzzle
Today, high school athletes are either playing multiple sports or are involved in year round activity. With most of their time being committed to practice and training, young athletes don’t consider the impact nutrition plays on health and performance. Studies confirm nearly 40% of high school students don’t eat breakfast. For athletes, this puts them in a severe calorie deficit by afternoon practice. Many high school athletes, especially those looking to gain weight, look for the answer to solve their eating problems with a dietary supplement. Today, 12 million students take supplements and 25% of supplements are spiked with anabolic steroids or banned substances, therefore it is critical for Certified Athletic Trainers and Sports Dietitians to educate young athletes on a “Food First” culture to avoid the risk of ingesting harmful supplements.

At the conclusion of this session, attendees will be able to:
1. Recognize the scope of the youth dietary supplement problem and will know the social pressures that are driving this behavior.
2. Recognize why student athletes are looking for dietary supplements as the answer to replace a poor diet.
3. Describe the challenges and realities of the supplement buying process
4. Describe to student athletes on dietary supplement safety and how to choose supplements that are tested by a 3rd party lab
5. Implement a plan for their athletes
6. List the Top 10 nutritional challenges of the high school athlete

**Orthobiologics: The World of Stem Cell and Platelet Therapies**
Orthobiologic treatments are novel, exciting, and in many cases effective. Both stem cell therapy and platelet-rich plasma (PRP) therapy show promise in the treatment of certain sports conditions. Unfortunately, as with any new therapies, misinformation exists in the forms of word-of-mouth rumors, poorly fact-checked media reports, and less-than-scrupulous providers. Athletic trainers are uniquely situated to assist their athletes in navigating this challenging area of sports medicine. This presentation is an unashamedly honest, relentlessly evidence-based discussion of orthobiologic options available to our injured athletes. Dr. Gottschalk has performed these procedures in athletes young and old, at all levels of sports competition.

At the conclusion of this program, participants will be able to:
1. Define the terms “orthobiologics,” “stem cell therapy,” and “platelet-rich plasma therapy” in the context of sports medicine
2. Describe situations where orthobiologic treatment is appropriate
3. Explain the benefits and risks of stem cell therapy and platelet-rich plasma therapy for certain sports conditions
4. Evaluate if a provider is offering evidence-based orthobiologic treatment options

**The Pregnant and Post-Partum Athlete: Training and Safety Considerations**
This session “The Pregnant and Postpartum Athlete: Training and Safety Considerations” is designed to describe and present information on the benefits of exercise for maternal and fetal development and health. Training and conditioning activities will be described and discussed to help maintain athletic conditioning during pregnancy, physical recovery following delivery, and return to play and sport performance. Safety considerations, contraindications, and precautions of exercise during pregnancy and postpartum will be identified and recommendations made based on research and clinical evidence. Recognizing and adapting to the needs of the pregnant athlete falls within the scope of the athletic training practice.

At the conclusion of the program, participants will be able to:
1. Recognize and describe the benefits of exercise for pregnancy and postpartum.
2. Explain and integrate the American College of Obstetrics and Gynecology recommendations and guidelines for exercise and pregnancy.
3. Identify contraindications and precautions to exercise and intervene if necessary for safety of mother and child.
4. Describe maternal and fetal changes through the trimesters and postpartum and compare how exercise effects those changes.
5. Recommend and justify exercise choice and selection for safe exercise throughout pregnancy and postpartum to maintain athletic conditioning.
6. Develop and construct safe exercise programs for pregnancy and postpartum with different modes of training in a variety of settings to help accelerate return to play and sport performance.

**Should I Make My Athletes Think? The Inclusion of Dual-Tasking in Rehabilitation**

The dual-task paradigm incorporates cognitive tasks while simultaneously executing physical tasks. While many of our athletes are constantly performing cognitive tasks while competing, clinicians typically do not challenge athletes to think while doing rehabilitation. The incorporation of two concurrent tasks compete for our brain’s attentional demands. The inclusion of cognitive tasks challenge supraspinal processing stressing our body’s motor control processing. The purposes of this presentation are to 1) describe dual-task, 2) explain different types of cognitive tasks, 3) provide examples of dual-task exercises for orthopedic rehabilitation, and 4) thoroughly describe the current existing literature of dual-task interventions.

At the conclusion of the program, participants will be able to:

1. Describe dual-tasking and the different cognitive processes
2. Integrate dual-tasking into clinical practice for orthopedic pathologies
3. Describe the evidence-based background of the benefits of incorporating dual-tasking into rehabilitation

**Mother May I?: Athletic Training Moms: Dual Roles Can & Do Occur**

There has been a steady increase in the employment of female ATs and now females make up 52% of the NATA membership. Motherhood appears to be a catalyst for job turnover for female ATs. Studies have shown that at about age 28, female ATs tend to leave the athletic training profession and motherhood and work-life balance has the greatest influence on occupational change. This course will attempt to identify work-life balance concerns both before and after motherhood in the traditional setting. The goal is to help maintain female ATs in the profession and not have motherhood be a deterrent from staying in the profession.

At the conclusion of the program, participants will be able to:

1. Identify female AT’s perspective/experiences for work-life balance and motherhood in a traditional setting and longevity in their career.
2. Describe different strategies to promote work-life balance in athletic training.
3. Apply strategies to succeed in both the clinic and at home.

**Examining the Underlying Mechanisms Behind Soft Tissue Therapies: Are We Stretching the Truth?**

Athletic trainers often utilize soft tissue therapies and stretching as an important adjunct in their treatment and rehabilitation programs. Often, procedures and protocols are utilized with the goal of effecting changes in the tissue texture, or extensibility. These goals are often at odds with the current research literature, which points to other possible mechanisms of action. This presentation will examine the current science. It will attempt to dispel some myths, and instead examine other possible neuro-biological mechanisms that may explain how soft tissue therapies, including tissue release protocols and stretching, exert their clinical effectiveness.

At the conclusion of this presentation, participants will be able to:
1. Use current science to analyze and critique flaws in the popular treatment models, including the theories of “breaking up adhesions” and “stretching the fascia”.
2. Compare the effectiveness of “hands-on” vs. implement assisted soft tissue treatment approaches. Attendees will also examine the research regarding foam rolling and stretching protocols.
3. Recognize the benefits and limitations of each soft tissue treatment approach discussed, and formulate an understanding of the basic neurological and biological mechanisms at play.
4. Utilize the material to identify how to best combine approaches to maximize treatment outcomes, with an emphasis on independence from any one particular protocol or system.

Lesbian, Gay, Bisexual, Transgender, Queer, (LGBTQ) Health Disparities: Increasing Athletic Trainers Knowledge and Communication Skills to Improve Care for LGBTQ Patients

Lesbian, gay, bisexual, transgender, and queer (LGBTQ) patients include all races, ethnicities, cultures, religions and social classes. However, contrary to race and ethnicity, information related to sexual orientation and gender identity is not typically visible nor surveyed or asked, making it difficult to obtain specific data related to health care disparities in this population. This also makes it difficult for health care providers to address specific issues relevant to LGBTQ individuals. However, research does show that LGBTQ individuals are overall more likely to face discrimination and denial of their civil and human rights. Also, research shows high rates of psychiatric disorders, substance abuse, experiences of violence, and suicide in LGBTQ the community. The purpose of this session is to educate Athletic Trainers on LGBTQ terminology and health care concerns. Also, practical tips for improved cross-cultural communication skills to elicit an appropriate medical history and to provide patient-centered initiatives will be provided.

At the conclusion of the program, participants will be able to:

1. Discuss the extent of health care disparities in the LGBTQ individuals
2. Recognize the potential role of athletic trainers in the reduction of healthcare disparities for LGBTQ patients.
3. Define standard terminology in the LGBTQ community
4. Utilize strategies to gather appropriate sexual identity and gender identity issues and patient value information on health intake forms
5. Apply patient centered strategies to improve patient communication and trust
6. Recognize the importance of cultural competence and patient centeredness in providing quality health care to all patients

Developing Your Own Concussion Network: What To Know, What To Do

Although the majority of concussions spontaneously resolve in a relatively short period of time, preparation for more complicated cases is vital. It is easy to feel trapped in a silo when practicing athletic training, but prolonged concussions require a multidisciplinary approach. Various professions have specific strengths when treating concussion, and may also be able to better identify comorbid conditions affecting recovery. Identifying the members of the team can be challenging, especially when resources are limited. This session will discuss the ideal concussion management team as well as methods to establish a comprehensive network based on what may be available.

At the conclusion of the program, participants will be able to:
1. Describe key members of the comprehensive team
2. Identify appropriate specialists to whom a referral may be appropriate
3. Develop policies and workflows for optimal student athlete/patient outcomes
4. Recognize the importance of integrating a multidisciplinary team to optimize recovery

**In Search of True Value: Calculating Your Worth With Legitimate Math**

Athletic trainers face growing pressures to demonstrate value and a return-on-investment for the care they provide. Unfortunately, many of the processes athletic trainers deploy to create such a calculation fail to meet the requirements of operations and finance experts. We will identify specific pitfalls ATs commonly encounter when calculating their value. Further, we will discuss leading practices in tracking services rendered and creating a fair-market valuation for those services. Rooted in similar practices currently in use in the broader healthcare setting, these approaches will include a detailed review of documentation standards, common procedural terminology, and regionally adjusted reimbursement levels.

At the conclusion of this session, participants will be able to:

1. Identify common errors and common best practices in calculation the healthcare value of services
2. Integrate data management processes to improve accuracy of valuation processes
3. Design a custom, proactive valuation plan that includes collection of data and identification of regionally adjusted standards
4. Support valuation statements with operations and financial leaders through comparative industry best practices

**Active Rehabilitation Strategies for Concussion: Clinical and Research Advances for Concussion Care**

Current strategies for concussion management are largely passive in nature. Recent evidence suggests that an active approach to concussion treatment may improve clinical and patient-centered outcomes. These approaches include early, clinician-guided activity, aerobic exercise, and deficit focused interventions, such as visual or vestibular therapies. Clinicians have long discussed more actively treating concussion. The pace of advances in this field make it difficult to keep up with practice considerations. This presentation will provide evidence supporting active rehabilitation of concussion and will outline strategies that athletic trainers can incorporate into their concussion protocols that align with current best practices in concussion management.

At the conclusion of the program, participants will be able to:

1. Describe current evidence-based advances in the active management and treatment of concussion
2. Identify active management and treatment strategies that will be useful in clinical practice
3. Describe current research and application of this research for future advances in concussion treatment

**Sleep Recommendations for Competitive Athletes**

Sleep has many physiological and cognitive functions that may be important to elite athletes. Sleep deprivation can have significant effects on athletic performance, which may be dependent on both
quality and quantity of sleep. Detrimental effects due to sleep deprivation can lead to decline in performance while affecting fatigue and recovery. Because athletes at various levels may encounter many obstacles to normal sleeping patterns, athletic trainers would benefit from developing a strong foundation regarding sleep habits to educate athletes. Athletic trainers may find a niche as the most accessible health care provider for athletes to seek advice.

At the conclusion of this program, participants will be able to:

1. Identify the two main electrical states of the sleep cycle. (Knowledge)
2. Interpret the effect of sleep deprivation on exercise and athletic performance. (Comprehension)
3. Distinguish barriers within their own practice setting that may interfere with sleep performance. (Analysis)
4. Construct solutions to minimize barriers to optimal sleep patterns in elite athletes. (Synthesis)
5. Apply sleep recommendations to current athletic teams to improve performance and health status of athletic participants. (Application)

It’s Not All in Your Head: Epidemiology, Treatment, and Patient Outcomes for Generalized Anxiety and Panic Disorders Observed in Division I Athletes

Depression and generalized anxiety disorder (GAD) with concomitant agoraphobia have extremely high prevalence rates in high caliber and elite athletes as compared to the general population. Early diagnosis and counseling by a licensed mental health professional is the primary step in treating these disorders. However, physiological changes occur as a result of psychological stress and lead to chronic pain that is often misdiagnosed as an overuse injury. Athletic Trainers (ATs) are responsible for treating the chronic pain, but most have very little training in treatment paradigms that can be used for the physiological response associated with mental health disorders.

At the conclusion of this program, participants will be able to:

1. Identify the warning signs of most common mental health disorders and follow the guidelines for referral in the NATA Consensus Statement on Developing a Plan to Recognize and Refer Student Athletes with Psychological Concerns at the Collegiate Level.
2. Articulate the physiological response to a prolonged state of “fight or flight.”
3. Differentiate central sensitization.
4. Utilize several key treatment paradigms for pain associated with central sensitization.

Post-Anterior Cruciate Ligament Reconstruction and Pre-Osteoarthritis: Can We Improve Outcomes?

Individuals who are post-ACL reconstruction (ACLR) or cope with knee osteoarthritis (OA) exhibit a plethora of overlapping impairments, activity limitations, and participation restrictions. Interestingly, decreased self-reported function, quality of life and poor functional measures are similar between these two populations. Mitigating these deleterious outcomes in post-ACLR individuals prior to developing OA is essential for diminishing this healthcare burden. In addition to traditional rehabilitation exercises, intervention strategies to address personal and environmental factors that may create barriers to preserving health may be beneficial. Therefore, the purpose of this presentation is to provide examples of exercise protocols and health promotion activities to improve health outcomes in post-ACLR individuals.

At the conclusion of the program participants will be able to:
1. Identify deleterious outcomes post-ACL reconstruction which continue to impact individuals after cessation of formal rehabilitation.
2. Examine the similarities in these outcomes between post-ACL reconstruction individuals and individuals with osteoarthritis.
3. Review evidence based rehabilitation strategies that have been shown to improve impairments, restrictions and limitations in post-ACL reconstruction patients.
4. Develop effective, multifaceted intervention strategies to improve outcomes in post-ACL reconstruction individuals to delay posttraumatic osteoarthritis development.

**Athlete Mental Health: Collaboration for Effective Care**

Athlete mental health is increasingly important within sports medicine. Given the integral role of athletic trainers, they are often the first point of contact for athletes experiencing mental health difficulties(1) during and independent of injury rehabilitation(2, 3). Although athletic trainers are responding to these emotional experiences, many do not feel equipped to provide psychological assistance(4). Moreover, many sports medicine teams do not have mental health providers with expertise in working with athletes in their departments(5). Therefore, athletic trainers would benefit from education regarding how to identify and refer athletes experiencing mental health difficulties to qualified mental health providers.

At the conclusion of the program participants will be able to:

1. Identify the relationship between injuries (including concussions) and mental health concerns
2. Develop best practice guidelines regarding mental health concerns
3. Recognize the role of the AT in the referral process and management of mental health concerns

**Looking Past Physical Injury: Mental Health Primer for the Athletic Trainer**

This presentation is intended to provide an overview of the recognition and management of common mental health issues that face athletic trainers. Mental illness affects 1 out of every 5 individuals. Due to the stigma of mental illness and demands of sport, athletes are at significant risk of depression, anxiety, and many other mental health problems. Without appropriate identification, mental illness can also impact rehab and recovery from physical injury. It is therefore essential that all athletic trainers have a fundamental appreciation for the manifestations of psychiatric and psychological conditions. This will allow for earlier identification and support which, in turn, will expedite appropriate referrals for management and treatment.

At the conclusion of the session, attendees will be able to:

1. List the criteria for major mental illnesses, such as major depression, general anxiety, and bipolar disorder
2. Identify how mental illness impacts the course of recovery from physical and neurological injury
3. State different pharmacologic interventions utilized for various psychiatric illness

**Sleep As It Relates to Injury**

Sleep and its role in recovery is a growing area of research. Scientists purport that proper recovery after training and competition enables athletes to return to their pre-workout conditions quickly.1-3 The
benefits of sleep with respect to injury recovery is less well known. The purpose of this presentation is to provide background concerning the role that sleep plays in normal physiological process, as well as recovery from training and competition. Additionally, what is known about sleep and injury healing will be presented, giving attendees clear guidelines to follow with their patients.

At the conclusion of the session, attendees will be able to:
1. Explain the role of sleep in normal physiological processes;
2. Explain the role of sleep in recovery from training and competition;
3. Discuss the role sleep plays with injury healing; and,
4. Modify a given treatment plan to best utilize adequate amounts of sleep.

Applying the Athletic Training Skillset to Industrial Injury Prevention
Although preventable musculoskeletal injuries remain one of the most costly and pervasive barriers to employee wellbeing in the industrial sector, the role of allied health providers is typically focused on post-injury rehabilitation. This emerging practice setting provides a lucrative and vital opportunity for athletic trainers to successfully reduce the risk of musculoskeletal injury and improve employee health outcomes through direct application of clinical expertise. This session will address the value and challenges of applying the athletic training skillset to implement proactive injury prevention in the modern industrial workplace.

At the conclusion of the session, attendees will be able to:
1. Identify the opportunities for prevention and mitigation of musculoskeletal injuries in the industrial occupational setting.
2. Communicate the unique capabilities of the athletic training skillset from a cost-reduction standpoint to industrial stakeholders through relevant organizational outcomes.
3. Apply professional abilities to optimize employee well-being through an emphasis on maintaining functional capacity, early intervention, and individualized job coaching.

Selected Colorectal Pathologies in Athletes: The Athletic Trainer's Role in Primary Care Diagnosis and Management
Colorectal pathologies such as hemorrhoids, Pilonidal Disease, and anal fistulas can be a challenge for healthcare providers to diagnose and treat. The athletic trainer often has the role of identification and wound management, but this may happen at various points in the care process. A careful review of the etiology, diagnosis, and wound management of these pathologies will be conducted to assist the athletic trainer in gaining an understanding of differentiation between these pathologies. The clinical diagnosis will be discussed as well as pre and post-surgical care for these conditions as indicated. Wound care will be covered extensively in discussion of Pilonidal Disease and anal fistulas.

Most importantly, the athletic trainer will learn the importance of serving as a liaison between the patient, the colorectal surgeon, and family members who may have entrusted a patient to the athletic trainer’s care. The athletic trainer will gain an appreciation for these pathologies and be able to better conceptualize their own role in this complex care process. Additionally, this talk will initiate discussion on management strategies for these pathologies within athletic training practice.

At the conclusion of the session, attendees will be able to:
1. Differentiate types of hemorrhoids.
2. Differentiate between the pre and post-surgical presentation of pilonidal disease and anal fistulas.
3. Discriminate between pilonidal disease and anal fistulas in their initial presentation.
4. Analyze their own wound care practices in regards to colorectal pathologies and apply proper wound management strategies.
5. Evaluate their own level of knowledge and preparedness to care for a patient with colorectal pathology.

**Working Smarter: Productivity and Personal Efficiency for the Athletic Training Workplace**

Productivity and personal efficiency can contribute to improved work-life integration across athletic training settings. The digital age has created a time of great promise for athletic trainers; never has our work been more connected and digitally accessible. However, to deliver this promise a new skill set is needed to allow athletic trainers to work smarter. Given the range of available productivity choices, simply getting started can be an overwhelming task. This special topic session will present productivity tools to help athletic trainers improve their work flow, task organization, communication, information management skills, and ultimately improve personal efficiency in the workplace.

At the conclusion of the session, attendees will be able to:

1. Assess productivity and personal efficiency needs for their employment setting.
2. Evaluate productivity tools to address specific work needs.
3. Construct a personalized work flow plan to tackle incoming information and task organization.
4. Employ resource management techniques to efficiently organize evidence based resources.
5. Formulate a personal productivity strategy in the interest of work-life integration.