

Network News

VOLUME 4, ISSUE I

MARCH 2013

THE ATHLETIC TRAINING PRACTICE-BASED
RESEARCH NETWORK
(AT-PBRN)

Director's Update

We are pleased to present this edition of the AT-PBRN Newsletter and hope you find the information useful as you continue to use the EMR for patient care. We thank those sites that are participating in our first funded research study through the PBRN evaluating health-related quality of life following sport-related injury.

The AT-PBRN has continued to grow and we welcome the following new sites:

- ◆ Academy of the Holy Angels, Demarest, NJ, Nicole Walsh
- ◆ Arcadia High School, Phoenix, AZ, Emily Clarke
- ◆ Cactus Shadow High School, Scottsdale, AZ, Eric Bealer
- ◆ Chaparral High School, Scottsdale, AZ, Nick Rawlins
- ◆ Coronado High School, Scottsdale, AZ, Paul Wheeler
- ◆ Jamesville-Dewitt High School, Dewitt, NY, Amy Chaffee
- ◆ Marymount School of New York, New York, NY, Kristina Califano
- ◆ North Carolina Wesleyan College, Rocky Mount, NC, Carol Carson, Josh Long, Ryan Averett, Tim Donovan
- ◆ Saguaro High School, Scottsdale, AZ, Nickie Edwards
- ◆ Verrado High School, Buckeye, AZ, Nicole Sweer, Robert Dyson
- ◆ Western New England University, Springfield, MA, Erin Cloutier

We are excited about all of these new sites and believe they will find value in using the EMR and as part of the AT-PBRN. The addition of Saguaro, Coronado, Chaparral, and Arcadia High Schools, along with established site Desert Mountain gives the AT-PBRN our first complete school district, Scottsdale Unified School District, where all athletic trainers will be using the EMR.

Best of luck as you finish this academic year. Stay tuned for our May-June newsletter where we will be providing some updates regarding new BOC standards that will provide CEUs for participating in clinical research through the PBRN and list AT-PBRN presentations at the NATA meeting in Las Vegas.

Tamara

Call for Proposals!

Do you have something interesting to share with the other members of the Athletic Training Practice-Based Research Network? Would you like to write a short article for the next newsletter? Potential topics could include:

- ◆ Research updates for your clinical practice site or institution,
- ◆ Clinical case studies or case series reports,
- ◆ Academic or research achievements of students or faculty,
- ◆ Other information relevant to members of the AT-PBRN.



With ideas, please contact Cailee McCarty, Post-Doctoral Fellow at A.T. Still University, at cwmccarty@atsu.edu or 480.219.6178 by 04/15/13

2013 Athletic Training Educators' Conference PBRN Advisory Board and Member Presentations

The 2013 Athletic Training Educators' Conference was a success and it was a great opportunity to catch up with our colleagues and peers. Several PBRN advisory board and other members presented at the 2013 Athletic Training Educators' Conference in Dallas. If you did not have a chance to attend the conference, or were unable to participate in some of the session, we have included links to the handouts from the presentations of our PBRN advisory board and members below:

Gary Wilkerson and Craig Denegar

Bridging the Chasm Between Research & Clinical Practice in Athletic Training: A Discussion of Methods and Analyses

Pre-Conference Workshop [Handout](#)

Gary Wilkerson and Marisa Colston

Patient-Centered Athletic Training: Issues in Clinical Practice, Research, and Education

Plenary Session [Handout](#)

John Parsons and Eric Sauers

The (Controversial) Future of Doctoral Education in Athletic Training Education

Plenary Session [Handout](#)

Alison Snyder Valier and Kenny Lam

Beyond the Basics of Clinical Outcomes Assessment: Selecting Appropriate Patient-Rated Outcome Measures for Patient Care

Concurrent Breakout Session [Handout](#)

Cailee McCarty and Dorice Hankemeier

Educational Tools and Clinically-Based Assignments to Infuse the EBP Competencies Throughout Your Curriculum

Plenary Session [Handout](#)

Cailee McCarty

Knowledge Translation: Is it the Key to Developing Effective Evidence-Based Clinicians?

Concurrent Breakout Session [Handout](#)

*If you were
unable to attend
the 2013 ATEC,
the presentation
handouts from
our PBRN
advisory board
members are
available!*

Identifying an Approach to Examine the Health-Related Quality of Life Among Adolescent Athletes

Each year, more than 3 million injuries occur annually in children and adolescents that cause time lost from organized sports, resulting in significant health care costs. More importantly, they result in significant human costs to growing adolescents whose physical activity levels and physical and psychological health are frequently mediated by their sport participation. Sport-related injuries leading to temporary or permanent disqualification from athletic participation have the potential to significantly impact adolescent health-related quality of life (HRQOL). Injury resulting from participation in interscholastic athletics is a national health concern, which can likely be minimized with proper intervention and management. The large number of participants, risk of injury, and associated health care and human costs should make investigations into this area a priority. However, there is little research, to date, that examines the health-related outcomes in adolescent athletes following sport-related injuries.

Our Plan:

To combat this issue, our research team is pioneering an approach to examining health related quality of life for high school athletes and offers athletic trainers **access to an EMR system at no cost**. To initiate the process, we are collecting normative data for generic health-related quality of life of healthy adolescents and adolescent athletes who have sustained a sport-related injury and are receiving healthcare services from athletic trainers in the secondary school settings. Clinicians will document sport-related injuries to interscholastic sport athletes using a custom, web-based electronic medical record (EMR) that integrates patient-oriented outcomes measures with usual clinical documentation. Specifically, each injured athlete will be asked to complete outcome measures at day of injury, day 10, every two weeks thereafter until return-to-play, and at discharge as prompted by the EMR system.

Participants receive web-based training on the EMR, as needed, and have access to additional technical support for the software through the AT-PBRN research staff. Through the EMR, ATs will be able to generate reports regarding injury summaries, injury status, time loss, and economic estimates as well as create coach reports.

Tip of the Quarter: Current Injury Status

With the large number of patients we treat on a daily basis, it might sometimes become difficult to remember the status of each individual patient. While there are many different strategies to combat this issue, our EMR has a built in helpful feature - the injury status report.

The injury status report, found under the reports tab of the athletic trainer main page, provides you the ability to create sport-specific reports for all injured patients. These reports will list all patients who are currently being treated for an injury, sorting them by participation status. Reports can be printed directly from the EMR, and each sport will print on separate pages.

Running an injury status report at the beginning of each daily may provide you with several benefits. This report may serve as a reminder of 1) which patients you need to see each day, 2) identify which patients may be lost to follow up, and 3) which patients need to be discharged because they are no longer injured. Additionally, the injury status report can be printed and provided to coaches on a regular basis so that they can be aware of which athletes are restricted to limited or no participation.

If you are interested in learning more about this study and collecting HRQOL information for your patients, please contact Cailee McCarty at cwmccarty@atsu.edu



Daily reports
will help you
remember the
status of your
patients

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Understanding the *NATA News* Clinical Bottom Line

For the past few years, the *NATA News* has periodically published a column referred to as the Clinical Bottom Line. This column was initiated by the Evidence-Based Practice Task Force and aims to address practices and procedures supported by evidence that are important to athletic trainers. Previous topics have included:

Keep your eye out for the Clinical Bottom Line, which will be published in the following 2013 issues of the NATA News:

March

May

July

October

December

- ◆ Evaluating Meniscal Injuries (July 2010)
- ◆ Global Rating of Change (January 2011)
- ◆ Evaluating ACL Injuries (June 2011)
- ◆ Interferential Current for Pain Reduction (March 2012)
- ◆ Generic Patient-Oriented Outcome Instruments (May 2012)
- ◆ Evaluating SLAP Lesions (October 2012)
- ◆ Effectiveness of HIVAMAT (December 2012)

Due to the popularity of the column, the Clinical Bottom Line will be available in five issues during 2013. Keep your eye out for the column in the March, May, July, October, and December issues.

If you are interested in writing a Clinical Bottom Line, or would like to suggest a topic that you feel is important should be considered, please contact Cailee McCarty at cwmccarty@atsu.edu

Impact of Prior Concussions on Health-Related Quality of Life Among Collegiate Athletes

Kuehl MD & Synder AR, Erickson SE, Valovich McLeod TC.

Clin J Sport Med. 2010;20(2):86-91

(Summary by Aubrey Yanda, ATC)

Sports related concussion is among the most popular topics in sports medicine due to an increase in awareness and research. Additionally, research literature has also become more prevalent regarding how a sport-related injury affects an individual's health-related quality of life. Kuehl et al. looked at a cross-sectional sample of 302 college athletes from division I,II, III and junior colleges. These athletes completed a demographic and concussion history questionnaire as well as the HIT-6 and SF-36 patient-oriented outcomes instruments during the preseason. Subjects were grouped according to number of previous concussions reported as either 0, 1-2, or 3+. Results of the study indicated that the 3+ group had significantly lower scores for bodily pain, vitality and social functioning on the SF-36 when compared with the 1-2 and 0 group. On the HIT-6 the 3+ group reported a significant difference of impact of headache compared to the 1-2 and 0 group. The findings of this investigation suggest that history of prior concussion negatively affects health-related quality of life in domains such as vitality, social functioning and bodily pain. This study highlights the need for clinicians to include patient-oriented measures during pre-participation physicals as tools to assess patients with history of previous concussion. This study is also useful to show importance of the use of generic (SF-36) and specific (HIT-6) outcome measures to assess athletes following concussion to better determine recovery and how athletes are responding to injury and treatment.

Clinical Outcomes Assessment for the Management of Sport-Related Concussion

Valovich McLeod TC, Register-Mihalik JK.

J Sport Rehab. 2011;20:46-60

(Summary by Regina Baker, ATC)

Athletic trainers are typically at the forefront of evaluation and management in the athlete population, making clinical decisions regarding diagnosis, treatment, and eventual return to play. A 2011 article by Valovich McLeod and Register-Mihalik looks at management of concussions, and how outcome assessment tools can be beneficial in making good clinical decisions. Concussion management has begun to shift away from traditional clinician-based measures toward focusing on a patient's health-related quality of life (HRQOL). Long term post-concussion symptoms, such as depression and anxiety, can have a negative impact on an individual's home, school, social, or work life. This can have implications for management and the kinds of decisions made with regards to implementing the best treatment program, and so, it is essential that information about the whole person – including HRQOL – be recorded as well.

Typically, we assess an individual's HRQOL by administering patient-oriented outcome instruments that focus on subjective information from the patient. For example, we would use the Disabilities of the Arm, Shoulder, and Hand tool (DASH) for a patient with a shoulder injury. Likewise, a patient with an ankle injury would be asked to complete the Foot and Ankle Ability Measure (FAAM). Concussions cause a variety of symptoms that can potentially affect an individual's psychological and social well-being, as well as their ability to perform their activities of daily living; it is logical that a patient-based outcome be used in this scenario as well. Patient-oriented outcome instruments can either be related to a person's general health, or it can assess quality of life with regards to specific injuries or parts of the body. An example of a generic outcome measure would be the SF-12. Likewise, some measures that may be more relevant to a concussed patient include the Head Impact Test (HIT-6) and the Migraine Disability Assessment Scale (MIDAS).

It may seem tedious to use both a generic and a specific outcome measure; however, general measures assess a patient's overall well-being with regards to disability and functional limitations as seen on various disablement models, and helps to look at the patient as a whole, rather than just their head injury. Additionally, generally a concussion has an impact beyond just neurocognitive impairments; for example, concussions can impact a patient's ability to fulfill their duties in society, such as a student doing homework, or a worker at their place of employment. Concussions have a greater effect on general quality of life, and it can be easy to take that for granted if we only focus on clinician-based measures. Thus, the optimal means to manage an athlete and their concussion should not only include methods to assess neurocognitive function, but also methods to assess how the athlete's concussion is affecting them as they try to function in everyday life. Using a combination of clinician-based measures and generic and specific patient-oriented outcome instruments will aid clinicians in providing the best possible care to our patients.

Including patient-oriented outcome instruments during pre-participation physical exams is particularly important for patients with a previous history of concussions

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