

# Network News

VOLUME 3, ISSUE 2

JUNE 2012

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

## Director's Update

I hope you are all taking some much deserved rest after another successful academic year. This year has been a successful one for the PBRN with the addition of many sites, the establishment of our first research partnership, the inclusion of our new forms to the EMR, and the acceptance of the PBRN's first two peer-reviewed manuscripts.

The current status of the PBRN is included on page 3, with the number and location of sites, number of patient encounters and most prevalent diagnoses and treatments. Since the inception of the daily sign-in log, we have over 14,000 patient encounters within clinical practice sites. We have also had 2 publications accepted in *The Journal of Athletic Training*, one a commentary on the usefulness of PBRNs for conducting point of care research, and the second, a descriptive study of the AT-PBRN.

The new reporting features that were described in the last issue of the Network News have gone live. Clinicians now have the ability to create and print the below reports for their clinical practice. The EMR user manual is currently being updated to include these features and will be distributed to members over the summer.

- Time Loss: determine the average time loss (from injury to return to participation) for your patients
- Economic Estimates (Total Service): estimate the general cost of the services you provide to your patients
- Injury Summary: generate a summary of the type of injuries you are treating within your athletic training clinic
- Injury Status ("Coaches Report"): generate sport-specific reports for currently injured patients

In this issue we highlight one of our secondary school clinical practice sites - Desert Mountain High School - where Tasha Anderson, has been using the EMR for just about 2 years. We also highlight one of our Advisory Board Members, Tim McGuine, PhD, ATC, and the clinical research he has been doing at Wisconsin. A list of presentations by PBRN Advisory Board Members and researchers at the upcoming NATA meeting is also included. We hope to see some of you in attendance. Best wishes for a safe and enjoyable summer!

*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](mailto:cwmccarty@atsu.edu) or 480.219.6178 by 8/15/12

## Clinician Spotlight: Tasha Anderson



Name: Natasha Anderson, AT

Position: Head Athletic Trainer

Clinical Practice Site: Desert Mountain High School, Scottsdale, AZ

Years Certified: 9

### *Please describe your clinical practice site.*

Desert Mountain High School is located in Scottsdale, AZ, and is one of the largest high schools in Arizona, with over 600 athletes competing on 19 different teams within the Arizona Interscholastic Association (Division 1). Most athletes compete in one sport, but participate in the sport year-round through off-season programs and club teams in the area. Although I am technically employed by a local physical therapy clinic, I spend 100% of my time at the high school and provide coverage for all on-campus activities for both in-season and off-season sports.

### *What barriers did you encounter when initially implementing the CORE-AT EMR into your daily practice? How did you overcome this barrier?*

I began my career working in a sports medicine clinic where an extensive amount of documentation was required for reimbursement purposes. Therefore, I have always been accustomed to day-to-day record keeping. The biggest barrier to implementing the CORE-AT EMR into my clinical practice was the transition from a paper-based system I had been using for years to a web-based EMR system. When I first transitioned to the EMR, I would document on my paper forms first, and then input the information into the EMR system. Once I became more familiar with the CORE-AT system, I was able to cut down on my paper documentation and input the information directly into the system. Another barrier was related to computer access. I only have access to my computer in my athletic training clinic so could not complete my paperwork while covering practices. I overcame this barrier by simply completing my record keeping before or after practice when I am in my office. The longer I continue to use the system, the easier and faster it is for me to get forms completed. So, in the long run, it is saving me time.

### *Are there any barriers you still need to address to fully incorporate the CORE-AT EMR into your clinical practice?*

Currently, my major barrier is getting the athletes registered into the system. Originally, I was trying to register all of them on my own based off of team rosters.

This proved to be very time-consuming and was quickly abandoned. At this point, I am trying to use the patient self-registration module from the CORE-AT EMR homepage. However, occasionally, a patient attempts to register him-/herself while I am busy assisting other patients. Since I cannot walk the patient through the registration process, the information is sometimes inputted incorrectly. For the upcoming year, I plan to give all of my athletes the self-registration information during pre-season team meetings and have each patient register at home prior to the start of his/her season.

### *What are the major benefits of using the CORE-AT EMR?*

Once I learned how to navigate the system, it became very easy for me to use. I would estimate that using the CORE-AT system has cut my total documentation time in half. The templates are very comprehensive and the drop-down menus and check boxes make it very user-friendly. I also enjoy the fact that it is web-based so I can access all of my patient records from anywhere that I have internet access. I am also very excited about the new clinician reports feature, which will be very helpful in communicating with coaches regarding injured athletes.

*“...using the CORE-AT system has cut my total documentation time in half.”*

## Athletic Training Practice-Based Research Network Members and Statistics

A snapshot of the AT-PBRN members and the top diagnoses and treatments entered into the EMR through Spring 2012.

	Number
Total CPS sites	50
Athletic Trainers using CORE-AT	66
High school CPS	45
College CPS	4
Clinic CPS	1
Location	AZ, CT, FL, KS, MA, MN, MO, NH, VA, WI, Singapore
Patient Encounters	8,815
Patient Initial Evaluations	3,730
Daily sign-in log Encounters	14,430

*The Daily Sign-In Log has recorded over 14,000 patient encounters*

Diagnosis	ICD-9	Frequency
<b>Sprain/Strain: Ankle</b>	845,845.01, 845.03	518
<b>Sprain/Strain: Hip, Thigh, Groin</b>	843.9, 844.9	386
<b>Concussion</b>	310.2, 850.0, 850.5, 850.9	454
<b>Knee Pain</b>	719.46	106
<b>Sprained Cruciate Ligament</b>	844.2	78
<b>Low Back Pain</b>	724, 846, 846.1	57

Treatment/Procedure	CPT	Frequency
<b>Athletic Trainer Evaluation / Re-evaluation</b>	97005	5078
<b>Hot or Cold Pack</b>	97010	3761
<b>Strapping (tape/wrap)</b>	29240, 29260, 29280, 29520, 29530, 29540, 29550	1170
<b>Therapeutic Exercise</b>	97110, 97530	2348

## PBRN Advisory Board and Member Presentations at the NATA Annual Meeting

Several PBRN advisory board and other members are presenting at the NATA Annual Meeting in St Louis. If your schedule allows, we would love to see you in attendance. Please also look for several free communication abstracts from members.

### **Bonnie Van Lunen**

Model Practice in Curricular Integration of the Athletic Training Education Competencies  
Thursday June 28, 7:00am-9:00am, Room 220/221/228/229

### **Gary Wilkerson**

Clinical Prediction Rules for the Prevention of Injuries  
Thursday June 28, 5:00pm-7:00pm, Ferrara Theatre

Pathogenesis of Muscle Inhibition  
Friday Jun 29, 1:15pm-3:15pm, Ferrara Theatre

### **Kellie Huxel Bliven**

Pelvic floor in athletic populations.  
Friday, June 29, 1:00-3:15p

### **Kenny Lam**

Clinicians are paramount: implementing a practice-based approach to improve patient care and clinical outcomes at the point-of-care. *Practice-based partnerships: connecting clinicians and researchers to improve patient outcomes*  
Wednesday June 27 @ 10:45a-12:45p, Ferrara Theatre

### **Eric Sauers**

The Evidence-Based Shoulder Exam: How To Do It, What it Means, and Using it in Your Practice.  
Tuesday June 26, 10:30a-5:30p, Rooms 2201/221/228/229

A climate of accountability: assessing the comparative effectiveness of athletic training services through practice-based partnerships . *Practice-based partnerships: connecting clinicians and researchers to improve patient outcomes*

Wednesday June 27 @ 10:45a-12:45p, Ferrara Theatre

### **Alison Snyder**

Integrating Patient-Oriented Outcomes into Clinical Education.  
Wednesday, June 27, 1:30-2:30p, Room 132

### **Tamara Valovich McLeod**

Practice-based research networks: advancing athletic training research and patient care. *Practice-based partnerships: connecting clinicians and researchers to improve patient outcomes*

Wednesday June 27 @ 10:45a-12:45p, Ferrara Theatre

*Strategies for teaching evidence-based practice concepts in athletic training education.*  
Friday, June 29, 8:45-9:45a, Rooms 125/126

*Aim to see these  
and other talks  
given by PBRN  
Advisory Board  
Members at NATA  
in St. Louis*

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## Critically Appraised Topics

Kellie Huxel Bliven, PhD, ATC

Critically appraised topics (CATs) provide a short summary and appraisal of the best evidence using 3-5 articles to answer a focused clinical question. CATs are intended to provide a *Clinical Bottom Line* for clinicians who do not have the time to read through several lengthy research articles for direction in dealing with clinical cases. In an effort to make CATs readily available to clinicians, free online access is now available at: <http://journals.humankinetics.com/jsr>. We encourage you to check out current CATs, and to develop one of your own!

A CAT in JSR's May 2012 issue is summarized below:

### **Effectiveness of external-rotation immobilization after initial shoulder dislocation in reducing recurrence rates.**

Huxel Bliven K and Hamstra-Wright KL. 2012; 21(2): 199-203

*Background:* Anterior, traumatic shoulder dislocations are common injuries and often have a high recurrence rate. Immobilization in internal rotation (IR) is the most accepted nonsurgical treatment for initial shoulder dislocations. However, recent research suggests immobilization in external rotation (ER) may be more effective at reducing dislocation recurrence rates.

*Focused Clinical Question:* "In patients who sustain an initial traumatic shoulder dislocation, is immobilization in IR or ER more effective at reducing recurrence rates?"

*Summary of Search, "Best Evidence" Appraised, and Key Findings:*

When the literature was searched, 12 relevant articles were found:

- 2 of the studies reported significant reductions in dislocation recurrence rates after 3 weeks of immobilization in ER compared to immobilization in IR
- 2 of the studies demonstrate no difference in dislocation recurrence rates between immobilization in IR and ER positions

When age was considered, 2 studies reported reduced dislocation recurrence rates with immobilization in ER for patients 21-30 years.

*Clinical Bottom Line:* In a general population, moderate evidence exists to support immobilization in ER instead of in IR following an initial traumatic shoulder dislocation in reducing recurrence rates. However, if a patient is 21-30 years old, stronger evidence exists for reduced recurrence and better functional and stability outcomes when immobilized in ER. Strength of recommendation: level B evidence

*Steps for performing a CAT:*

1. Develop a focused clinical question. Only 3-5 articles are used to answer the question in a CAT, so "focus" the key!
2. Develop a PICO (Patient, Intervention, Comparison, Outcome) question from the focused clinical question.
3. The PICO question is used to guide the search strategy.
4. Several databases are searched for evidence using the search terms generated.
5. Inclusion and exclusion criteria for 'acceptable' studies are established a priori.
6. The level of evidence is determined for all studies that meet the inclusion criteria.
7. The "best evidence" articles are summarized, appraised, and used to answer the focused clinical question.
8. A short summary and comparison to other literature is provided as "Implications for Practice, Education, and Future Research."

## Researcher Highlight: Advisory Board Member Tim McGuine, PhD, ATC

- Positions:
- 1) Senior Scientist, UW Madison School of Medicine and Public Health - Dept. of Orthopedics & Rehabilitation.
  - 2) Research Coordinator, UW Health Sports Medicine Center

*Approximately 30% of the female athletes still had lower than expected HRQOL, joint function, and physical activity levels after one year post-injury*

For most of my career, I worked as a high school outreach athletic trainer and physician extender. The past six years I have transitioned to a research coordinator role that has focused on measuring patient self-reported outcomes for various orthopedic injuries and conditions.

I am currently part of a research team that seeks to document changes in Health Related Quality of Life, (HRQOL) Joint Function (JF) and the level Physical Activity (PA) in a cohort of young females (age 13 – 23) who have sustained a knee injury while participating in a sport or physical activity. While the data is still being collected, we are in the process of publishing several papers that show the expected drop in the health, knee function and physical activity immediately post injury. Just as interesting however, it appears that approximately 30% of the females still had lower than expected HRQOL, JF, and PA after one year regardless of the type of injury they sustained.

I also am the coordinator for the UW Health Sports Medicine Outcomes program with 5,400 enrolled patients. This program seeks to measure changes in HRQOL, JF and PA in patients from pre treatment (example: out patient orthopedic surgery, biologic injection) to one year post treatment. To date we have published several papers that report the how the findings of pre-surgery Magnetic Resonance Imaging are correlated with changes in HRQOL one year post surgery. We are also tracking changes in HRQOL and JF in a cohort of high school athletes who have undergone hip knee and shoulder surgeries. We hope to start to publish these findings in the next several months.

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

Athletic Training Program  
A.T. Still University  
5850 E. Still Circle  
Mesa, AZ 85206

Director Phone: 480-219-6035  
Fax: 480-219-6100  
E-mail: [coreat@atsu.edu](mailto:coreat@atsu.edu)