

# Spotlight on Athletic Training Practice-Based Research Networks: A Celebration and a Challenge

Todd A. Evans, PhD, ATC

If you're an athletic trainer (AT), you've undoubtedly been asked to explain what ATs do, but our roles in health care are so unique and diverse; how do we describe our patients (whom we serve), explain our services (what we serve), and detail our effects (why we serve)? More importantly, how do we justify our value, improve our services, and advance our profession in the public health care arena without being able to confidently proclaim what we do? Recent research published in *JAT*<sup>1–3</sup> and derived from research networks focusing on practice-based athletic training is helping us to understand what we do by studying those who do it. In this issue, Lam et al<sup>1</sup> provide a summary from the Athletic Training Practice-Based Research Network (AT-PBRN) that describes the practice characteristics of ATs in the secondary school setting based on more than 36 000 patient encounters in nearly 5000 patients from 34 schools in 10 states. Similarly, in 2015, the initial summaries from the National Athletic Treatment, Injury and Outcomes Network (NATION) were also published in *JAT*.<sup>2,3</sup> The NATION draws epidemiologic data from 147 high schools across 26 states, with the initial reports representing more than 50 000 injuries and 200 000 athletic training room visits. Establishing these large, practice-based research networks is not a trivial task. Their construction and maintenance take time, constant oversight, resources, and expertise. Of equal importance are the contributions and commitments from the practicing ATs who consistently document their daily patient interactions. Without the cooperation of these ATs, who allow their athletic training facilities to serve as clinical laboratories,<sup>4</sup> these networks could not exist. These coordinated, practice-based research efforts from our colleagues are worthy of praise and should be celebrated. For as important and timely as the current results derived from these studies are, it is these practice-based networks that have the potential to provide the data that will be critical to the advancement of athletic training.

Along with celebrating the networks themselves, we must, of course, highlight some of the novel findings derived from them. For example, it is becoming apparent whom we serve. Athletic trainers spend the majority of their time providing services for patients who seek our care but are still able to actively participate in their desired sport or activity. Based on data from the AT-PBRN, Lam et al<sup>1</sup> estimated that more than 60% of daily encounters were for patients with injuries that did not require them to miss any participation. Through the NATION, Dompier et al<sup>2</sup> found that most of the injuries in patients who presented to the

athletic training facility (82.45%) did not result in time lost from participation. Furthermore, Kerr et al<sup>3</sup> reported that most athletic training room visits (70%) were provided to patients who were still able to participate. Although any AT would attest to these findings, they are now supported by data from the practice-based networks. The significance of these findings cannot be overstated, as they begin to accurately portray a unique, and until this point uncountable, role of the AT. As our profession strives to strengthen its position as a health care entity, we can proclaim that many of our patients are active and are still participating. Participation, as it relates to one's ability to function, is an important domain in the World Health Organization's International Classification of Function.<sup>5</sup> Perhaps a case can be made that ATs facilitate participation. This may also shift the debate regarding the most appropriate outcome measure for documenting athletic training outcomes. The debate often turns to return-to-play status; however, because it depends on so many external variables, its validity as a health outcome is questionable. Based on this information from these research networks, we may want to broaden our view of our patients' meaningful outcomes and how they fit models such as the International Classification of Function. Rather than focus exclusively on the role that ATs play in restoring a patient to a specific level of activity or participation, we may need to shift attention to include our role in facilitating/maintaining/enabling activity and participation. The role of the AT as a participation facilitator is certainly worthy of further investigation and has been brought to the forefront through the establishment of practice-based research networks.

Another important element of both research networks is identifying what types of services ATs provide and why we provide them. Each network offers unique insight into these aspects of our practice and demonstrates the subtle differences in methods and operational definitions. Lam et al<sup>1</sup> reported that nearly half of the athletic training encounters in secondary schools were classified as preventive, with the most common services being taping and thermal modalities (specifically ice- and hot-pack application). For new injuries, the most common services provided were evaluation and thermal modalities.<sup>3</sup> Kerr et al<sup>3</sup> noted that therapeutic exercises represented the most common service provided by ATs (45.4%), followed by modalities (18.6%) and evaluations (15.9%). Similar to the patient characteristics, these results offer insight into the services routinely provided by ATs and the potential value of these services. For example, evaluations are a billable

service in most provider networks. Yet in the secondary school setting, when provided by an AT employed through the school, these services are typically not billed to a third-party provider. Furthermore, if the evaluation leads to immediate injury care and a more direct and efficient referral, minimizing the need for a billable visit for emergency care, then the value of the AT is enhanced. Moreover, treatments and therapeutic interventions, which appear to represent the most substantial AT-patient interactions, could represent an even greater value if they are indeed improving the health of our patients by maintaining their activity and participation status. Therein lies the challenge: assessing our outcomes. For as useful and important as it is to understand what we do, it is yet another matter to determine if our interventions improve our patients' health.

Establishing athletic training outcomes represents the next tier of information afforded by practice-based research networks. The first question all patients should ask and the underlying question asked by third-party payers is whether our interventions work? By documenting and tracking patient outcomes, not only can ATs improve the quality of patient care, but we can also improve our efficiency, establish our cost effectiveness, and strengthen our status in the public health care arena. The insight into athletic training patient outcomes that is possible from the networks developed to study practice-based athletic training and the effects these results can have on our profession may be essential as our profession moves forward. As we absorb and use the current results and await the future reports from the AT-PBRN and NATION, each AT can take steps to maintain the momentum. These steps represent the challenge. First, form your own PBRN in your own practice, document your daily patient interactions, and monitor your patient outcomes. This will improve your own practice. Second, participate in a current PBRN by

volunteering your site as a clinical laboratory. It will not only improve your own practice but serve the entire profession. Third, use the existing data as a blueprint for clinical research. Consider that not all clinical research is conducted within a research network. You can rely upon your own patients to provide critical evidence. For example, Lam et al<sup>1</sup> reported that ATs routinely apply ice. What is the effect of ice application on our patients? Does it reduce their pain? Does ice improve or maintain their participation status? The data are there, and these questions can be answered; they just need to be asked.

So let us celebrate these athletic training practice-based networks and appreciate the contribution they have made, the potential they offer, and how each of us can contribute to these efforts.

## REFERENCES

1. Lam KC, Snyder Valier AR, Anderson BE, Valovich McLeod TC. Athletic training services during daily patient encounters: a report from the Athletic Training Practice-Based Research Network. *J Athl Train*. 2016;51(6):435–441.
2. Dompier TP, Marshall SW, Kerr ZY, Hayden R. The National Athletic Treatment, Injury and Outcomes Network (NATION): methods of the surveillance program, 2011–2012 through 2013–2014. *J Athl Train*. 2015;50(8):862–869.
3. Kerr ZY, Dompier TP, Dalton SL, Miller SJ, Hayden R, Marshall SW. Methods and descriptive epidemiology of services provided by athletic trainers in high schools: the National Athletic Treatment, Injury and Outcomes Network study. *J Athl Train*. 2015;50(12):1310–1318.
4. Sauers EL, Valovich McLeod TC, Bay RC. Practice-based research networks, part I: clinical laboratories to generate and translate research findings into effective patient care. *J Athl Train*. 2012;47(5):549–556.
5. International Classification of Functioning, Disability and Health. World Health Organization Web site. <http://apps.who.int/iris/bitstream/10665/78691/1/ier15.pdf>. Published 2001. Accessed May 3, 2016.

---

*Editor's note: Todd A. Evans, PhD, ATC, is an associate professor in the College of Education at the University of Northern Iowa and a JAT Editorial Board member. Address e-mail to [todd.evans@uni.edu](mailto:todd.evans@uni.edu).*