

# Integrating Evidence-Based Practice in Athletic Training: Suggestions for Managing the Transition

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## INTRODUCTION

One thing that is consistent about health care and the associated health professions is that things are always changing. As challenges persist such as rising health care costs, an aging population and the need to treat increasing numbers of people with chronic health conditions, the field of health care must continue to explore ways to deliver quality care while reducing costs. Like many other health care professions, athletic training has turned to evidence-based practice to assure that athletic trainers are trained to deliver the highest quality of care in the most efficient way to their patients. The transition to integrating evidence-based practice can be challenging and will require a massive diffusion of innovation throughout the field of athletic training.

Athletic trainers (ATs) are defined as “health care professionals who collaborate with physicians. The services provided by ATs comprise prevention, emergency care, clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions. ATs work under the direction of physicians, as prescribed by state licensure statutes” (Profile of athletic trainers, 2014, para. 1). Despite being recognized as health care professionals by the American Medical Association (AMA), the general public often confuses ATs with personal trainers or physical education teachers. It is not uncommon for an AT to be asked the best ways to lose weight or the proper form of a squat. More than 70% of certified athletic trainers currently hold a master’s degree (Education overview, 2014, para. 1). The profession of athletic training is constantly growing, and athletic trainers can be found in many different settings. The traditional settings you would find an AT are in a school such as a high school or college working with the athletic teams, but they can also be found in the military, Cirque du Soleil, in companies working to enhance wellness of the employees, and even Disney Land (Emerging settings, 2016). Despite the breadth of employment opportunities other individuals in the health care industry are also unfamiliar with what an AT does and it is apparent that athletic training as a profession is still lagging behind other allied health professions (Hankemeier & Van Lunen, 2013a).

In order to change the perceptions of ATs to the public, the National Athletic Trainers’ Association (NATA) is introducing the use of evidence-based practice (EBP) in both academia and the education of new ATs, and in the clinical setting with athletic trainers already working in the field (Hankemeier & Van Lunen, 2013; Hankemeier et al., 2013; McCarty Hankemeier, Walter, Newton, & Van Lunen, 2013; Welch, Van Lunen, & Hankemeier, 2014b). There are many benefits to increasing the use of evidence-based medicine (EBM). One reason that is frequently discussed is improving both the image and recognition of athletic trainers as health care professionals and not personal trainers, physical education teachers, or the

DOI: 10.4018/978-1-5225-1049-9.ch095

people carrying water bottles on the sideline of games. Other benefits to using EBM include improving the care provided to the patients and justifying third party reimbursement (McCarthy et al., 2013; Welch et al., 2014a). Changes are being made to the curriculum of programs and what students are required to learn. The governing body in charge of athletic training education programs has mandated that all programs must teach EBP to the students in the program (Hankemeier & Van Lunen, 2013; McCarthy et al., 2013; Welch et al., 2014b). Furthermore, all certified ATs must complete continuing education units (CEUs) every three years to maintain certification. This has been in effect since 1973 and was originally mandated to promote attendance at the national conference and to encourage the idea that athletic training is a field with ever changing research and requires dedicated lifetime learning (Cuppett, 2001). Despite CEUs being a stipulation for many years, the reporting period in December of 2015 was the first time all certified athletic trainers were required to have ten CEUs come from an evidence-based practice category in order to maintain certification.

Evidenced-based medicine is an idea that dates back to the 18th century, but was first given an operational definition by Sackett et al. (1996) who explained it as integrating the best available research with the individual's clinical experiences and the patient's standards in order to make clinical decisions. EBM is not intended for an individual to make use of research blindly take it as the final word and devalue the insight of the clinician, but to marry the two. For evidence-based practice to work effectively a clinician must use personal knowledge, what is best for the patient in question, and the current research available to make a clinical decision. Past research indicates that there are a large percentage of patients that are not receiving the appropriate care, and care is not being provided based on the best research available (Schuster, McGlynn, & Brook, 1998). Many clinicians that have been practicing for many years become complacent and believe that what has worked in the past will continue to be the best option without inquiring as to whether there is a better, cheaper, or more effective treatment option out there (Steves & Hootman, 2004). If patients are not receiving enough care or are receiving the wrong care this can cause harm to the patient and is an added expensive for both the patient and the health care facility. EBM has become a hot topic in all branches of health care for this very reason; however athletic training has been lagging behind on implementing changes that promote the use of EBM (Steves & Hootman, 2004). Evidence-based practice (EBP) is important for ATs to improve their reputation in the health care world and the public perception, justify insurance reimbursement, and most importantly improve care received by athletes and patients (Hankemeier & Van Lunen, 2013a; McCarty Hankemeier, Walter, Newton, & Van Lunen, 2013).

Using EBP can be broken down into five steps as shown by Sackett et al. (1996). These steps include: defining clinically relevant questions, searching for the best evidence, critically appraising the evidence, applying the evidence, and evaluating how effective evidence-based medicine was when put to use. While these steps seem relatively simple when written out, research shows that clinicians that were not trained to do this feel uncomfortable using EBP (Hankemeier & Van Lunen, 2013a). Because there is constantly new information being published it can be a daunting task to try and look through all of it to determine what is useful and what is not. Creating a clinically relevant question is important because this can help to narrow down the search. Once one or more research papers are selected from using the relevant question, each paper must be critically appraised to determine whether the information is applicable. In order for an individual to critically appraise the evidence, one has to have some knowledge on how to effectively read a scholarly article. This may be a very difficult task for an athletic trainer that does not have any experience or background with what makes an article useful. Applying the evidence properly would require an understanding of the research in the first place, and proper analysis of how useful the evidence is would only be valuable if all other steps were properly executed. It is easy to see

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