

Education Continues to Evolve: Post-Professional Work Expands

By Valerie Hunt

Call it the continued evolution of athletic training education. With the most significant changes to entry-level education now accomplished, post-professional education in athletic training is coming under review.

Throughout this year, post-professional education – its purposes, its structure, its scope – will be studied by a committee formed in late 2005 when the Graduate Education Committee and the Specialty Certification Committee merged.

Now called the Post-Professional Education Committee, or PPEC, the group is charged with developing and promoting formalized athletic training education beyond the entry level. Chair Eric Sauers, PhD, ATC, CSCS, said the task begins with defining post-professional education.

“Post-professional education is formalized didactic and/or clinical education beyond entry-level certification,” he explained. “We are distinguishing this from continuing education – which is required for continued certification and often consists of brief periods of focused education throughout a professional’s career.

“Post-professional education, on the other hand, involves formal, longer-term experiences that may lead to an advanced degree, residency training, a certificate of completion or preparation to sit for specialty board certification exams,” Sauers added.

The PPEC’s goals stem from original education reform initiatives: strengthen the profession by strengthening the professionals.

“There’s a need for more people to obtain formal post-professional education in athletic training,” Sauers said. “It should provide expanded depth and breadth of knowledge and skills for practicing clinicians and for those seeking to become educators. It is important that we develop mechanisms to deliver and formally recognize post-professional athletic training education.”

NATA Education Council Chair Ken Knight, PhD, ATC, said the myriad issues involved in post-professional education have been discussed for some time. While post-certification graduate education programs and specialty certifications have a head start – each have been the focus of previous NATA committees – the idea of a post-certification residency

in athletic training has also been introduced.

“A year ago, as the Graduate Education Committee discussed the pros and cons of the issues facing the Education Degree Task Force, the idea of a formal residency/fellowship program following entry-level education began to take shape,” Knight said. “It seems like a natural evolution. It would allow newly certified athletic trainers to increase their confidence in their clinical decision making and solidify their entry-level education while working as a professional.

“In a sense, they would be on their own, yet with some support,” Knight explained. “But the concept must be developed and tested. That’s part of what the PPEC will be examining.”

President Chuck Kimmel, ATC, said post-professional education – in the form of accredited post-certification graduate programs, specialty certifications and residencies – is important to the future of athletic training.

“It’s in the best interest of the profession as a whole,” Kimmel said. “I think the Specialty Certification Committee, the Graduate Education Committee and the Education Degree Task Force – who each have done outstanding jobs – have identified what I hope will become a movement of athletic trainers to build on their BOC certificate.

“My hope is that post-professional education opportunities will flourish, allowing our members to become better educated in many different segments of our profession and our individual practice settings.”

education degree task force

The creation of the PPEC helps address recent recommendations by the Education Degree Task Force: make sure accredited entry-level programs and post-certification degree programs are better integrated and coordinated.

The task force said a strong emphasis on post-professional education will ensure that future athletic trainers have the knowledge and skills necessary for advanced clinical practice, research and scholarly contributions. NATA-accredited post-professional master’s degree programs should serve as the starting point, the task force said.

“These programs are truly the backbone of post-professional education in athletic training,” Sauers said.

From that foundation, the PPEC will begin to expand post-professional education opportunities for athletic trainers.

where to start?

The PPEC will start by evaluating 10 specific issues, as stated in the committee's December report to the Board of Directors:

- Create a comprehensive model of post-professional education in athletic training;
- Develop a framework and structure for specialty certifications in athletic training;
- Develop Advanced Practice and Certificate of Added Qualification credentials for post-certification graduates;
- Explore residency models for post-certification education, possibly a requirement of continuing education;
- Incorporate specialty certifications into graduate programs;
- Evaluate the current post-professional graduate athletic training education accreditation standards and guidelines;
- Promote outcomes research in post-certification programs;
- Promote the value of evidence-based practice and research skills as enhancing clinical care and outcomes;
- Promote health care policy, legislation, reimbursement, general health professions awareness in post-certification programs;
- Explore the value of both research and clinical doctoral programs.

specialty certification

Before the creation of the PPEC, the Specialty Certification Committee evaluated specialty certifications and carefully crafted content for the "Corporate Health Specialist"; this content outline will serve as a road map for developing educational systems to prepare people for the corporate health specialty certification. *(To view a PDF of the Corporate Health Specialist content outline, visit the NATA Education Council Web site at www.nataec.org and click the link in the "New Information" section.)*



Jim Vaillas, MD, (right) and Laura Decoster, ATC, (center) have developed a comprehensive experience for athletic trainers at the New Hampshire Musculoskeletal Institute. Program participants complete rotations in an astounding number of medical arenas, broadening their general medical knowledge.

Sauers said the Specialty Certification Committee did a great deal of background work in specialty certifications and presented a comprehensive business plan to help when considering implementation.

"A great deal of thanks is owed to those who have paved the way for specialty certifications, including Denise Wiksten, Ann Berry and all the previous members of the Specialty Certification Committee," Sauers said. "Our goal now is to evaluate the role of specialty certifications in a more global framework of post-professional education and to establish the structure for implementing specialty certifications."

That structure includes eligibility criteria, development of a valid and reliable certification exam for a specialty and criteria for developing future specialty certifications.

"We will work with other NATA committees, such as the CIC Committee in the case of the Corporate Health Specialist certification, to ensure that our plan meets the needs of the members," Sauers said.

residencies

The Graduate Education Committee

began discussing the idea of athletic training residencies more than a year ago. Several similar programs already exist and are featured in this article.

"In medicine, residency programs are instrumental to the development of advanced, in-depth clinical expertise in a more specific area of practice," Sauers said. "Given the magnitude and variability of knowledge needed to practice in a variety of settings, residency programs may offer a great solution for some individuals to grow as health care professionals."

definitions

The whole topic of post-professional education can get confusing very quickly unless terms are clearly defined. After reviewing various medical professions' terminology, the Education Council is using these definitions:

- **entry-level education (a.k.a. professional education):** curricula required to allow a person to enter a profession; in other health care professions, entry-level education can occur at the undergraduate, master's or doctoral levels.
- **post-professional education:** one of two types – post-professional education programs and continuing education.



— **post-professional education programs:** curricula designed for people who are already certified in a profession but want to pursue advanced degrees, residency training, specialty certifications or certificates of added qualifications.

— **continuing education:** education that supports the continued competency, certification and licensure of a certified professional.

— **internship:** a clinical education experience that can be part of requirements for graduation from a professional education program or can be additional, supervised clinical experience following graduation.

— **residency:** a planned program of post-professional clinical and didactic education that significantly advances preparation as a health care provider; in medicine, a physician who has finished medical school and internship and continues to receive training in a specialized area (surgery, for example) is a resident.

— **fellowship:** in medicine, some highly specialized fields require formal training beyond residency (like cardiology, for example); a fellowship accomplishes this specialized training through its focused, intense course of study.

role of post-pro education

Sauers knows change is not easy. Many in the profession might view efforts to formalize post-professional education as just so much more bureaucracy.

Currently, a majority of certified athletic trainers hold graduate degrees (a form of post-professional education). But most of those degrees are not in athletic training; instead, they're in business, education, exercise science, physical therapy, administration – the list goes on.

"Many people have historically advised entry-level students not to go to an athletic training graduate program 'because it's just the same stuff you've already learned.' Or they've said, 'You should diversify to be more employable,'" Sauers said. "In most cases, I don't think this is good advice, because there's so much athletic training-specific knowledge to be mastered beyond the entry level."

According to Sauers, the PPEC is ultimately responsible for developing a post-professional education structure that will help prepare advanced practice

clinicians, further develop a specialized body of knowledge through research and scholarship, and prepare clinicians for specialized settings.

"From a clinical practice perspective, from a research and scholarship perspective, from a lobbying perspective, there's no disadvantage to having people with formalized post-professional education," Sauers said. "So now we're just working to formalize it in the best way possible."

The PPEC met Dec. 9-11 to begin its work. Although that meeting was past the press deadline for this edition, watch for PPEC updates in future editions.

what's available now?

There are currently 12 NATA-accredited post-certification graduate athletic training education programs. *(To find the list, visit the Education Council Web site at www.nataec.org and click on "Academic Programs" in the Most Frequently Visited Pages section.)*

According to the Standards and Guidelines for Post-Certification Graduate Athletic Training Education Programs, "the mission of a post-certification graduate athletic training education program is to expand the depth and breadth of the applied, experiential and propositional knowledge and skills of entry-level certified athletic trainers, expand the athletic training body of knowledge, and to disseminate new knowledge in the discipline. Graduate education is characterized by advanced systematic study and experience—advanced in knowledge, understanding, scholarly competence, inquiry and discovery."

"These programs should be the first choice for most people interested in post-professional athletic training education," Sauers said. "They will be instrumental in any future development of accredited residency programs and the delivery of knowledge and skills required to successfully obtain specialty certification."

Some programs already offer experience similar to a residency: the New Hampshire Musculoskeletal Institute, Steadman Hawkins Clinic and Emory Sports Medicine Center.

"I think what they're doing is very valuable," Sauers said. "I think it's good

for our profession: these programs are very global, they offer a variety of great advanced clinical practice opportunities as well as research."

new hampshire musculoskeletal institute

About 12 years ago, the New Hampshire Musculoskeletal Institute developed its athletic training fellowship program. It has gained a reputation as an opportunity for athletic trainers to get hands-on experience in an astounding number of health care specialties.

NHMI Executive Director Laura Decoster, ATC, and NHMI President James Vailas, MD, created the fellowship together. Modeled after sports medicine fellowships like the one Vailas attended at the Kerlan-Jobe Orthopaedic Institute in Los Angeles, the NHMI program focuses on breadth of knowledge.

"The initial concept was to give athletic trainers general medical exposure because they're faced with everything, from socio-psychological problems to physical medicine problems," Vailas said. "We wanted our athletic training fellows to learn more and see more in the field of medicine, not just in regard to athletic training and athletes, but medicine in general."

Today, the year-long program, which begins in August, is open to two certified athletic trainers per year, out of dozens of applicants. Generally, fellows spend their morning hours doing clinical rotations, their afternoon hours performing athletic training services in a clinic outreach capacity at local high schools, and their off-work hours absorbing what they're learning while living in the rent-free apartment on the NHMI campus.

They earn a stipend, have health insurance and get time off; this is not indentured servitude.

That's the dimestore summary.

But those morning hours, five days per week, are packed. The fellows complete rotations with ambulance crews, orthopedic physician assistants, four sports medicine/orthopedic surgeons, a hand orthopedic specialist, a neurosurgeon, prosthetics/bracing specialists, two primary care physicians, general surgeons, a chiropractor, an occupational therapist, a radiologist, an oph-



thalmologist, a dermatologist, a podiatrist and a cardiovascular surgeon.

“Our fellows get more experience in a year than you might get in a whole career,” Decoster said. “My favorite-ever quote was from our third fellow, nine years ago. I said, ‘So, did you learn anything this year?’ She stopped what she was doing and said, ‘Laura, I would’ve had to have been in a coma not to learn anything this year.’”

Former NHMI fellow Tamara Valovich McLeod, PhD, ATC, CSCS, said the program opens doors.

“You do get a lot of exposure to a lot of different things,” she said. “I think from a professional development standpoint, it helps you understand the greater world of allied health care. The networking opportunities are tremendous. Personally, I met great mentors through the research project I did during the program.”

Oh yes – the research. Athletic training fellows must complete a research project during their year. They work with practitioners and are given specific time each month to focus on their research. The ultimate goal is to present their findings at the NATA convention or have their paper published in a peer-reviewed journal, Decoster said.

It all combines to create a year that reverberates throughout a fellow’s career, Vailas said.

“Our goal really is to make the program an experience the fellows will appreciate throughout their whole lives,” he said. “We want the fellowship to give back to the profession of sports medicine through athletic trainers being on the field, taking care of athletes or doing research to help increase the knowledge of the profession as a whole.”

“We’re very, very proud of our program,” Vailas added. “I would hope – and I think it will – eventually be an accredited means of obtaining post-professional education in athletic training.”

Scott Evans, PA-C, of The Orthopedic Center, is one of the practitioners fellows accompany during their year with NHMI. He said the program is very tailored.

“I ask them what they want to get out of this,” said Evans, who has worked with NHMI fellows for five years. “I ask where they want to be after the fellow-

ship, and then I tailor their rotation to their goals.”

Evans also sees the benefit to his own profession and certainly to the patient.

“From the orthopedist’s point of view, the athletic trainers are your first line of defense,” he said. “The idea is to teach the fellow what you’re doing, so if an athletic trainer picks up the phone and calls the primary care physician to discuss something, the athletic trainer has a good understanding of the medical terminology and process, and the physician feels more comfortable with sharing care.”

Education, increased professional respect all around, research skills – these are the things Decoster envisioned when she and Vailas began the athletic training fellowship. They also speak to the core values of the Institute overall.

“Our organization, the New Hampshire Musculoskeletal Institute, has a two-pronged mission: to conduct musculoskeletal research and to conduct musculoskeletal education,” Decoster said. “This program goes to both parts of our mission, and in the process, we hope we’re helping strengthen the profession.”

steadman hawkins clinic

The Steadman Hawkins Clinic, in Vail, Colo., has run an athletic training fellowship program for nearly as long as NHMI. Also home to a fellowship for orthopedic surgery, the clinic developed an athletic training fellowship for two primary reasons: to expand professional knowledge and to help manage a growing practice, said Bryan Diekmann, MEd, ATC, director of the program.

“We need help in the clinic, and this program works for that,” Diekmann said. “It does expand our daily clinic, but it also expands and broadens the fellows’ horizons and makes them more well-rounded athletic trainers when they go back into the public.”

“We bring in certified athletic trainers and put them through extensive clinical, outreach and physical therapy rotations,” Diekmann explained. “The clinical rotations cover everything that goes along with running a physician’s practice: evaluations, patient history, ordering films, interpreting results, patient

care, therapy updates. They help in all facets of the clinic, outreach, research, etc. – everything from a to z.”

Diekmann said the 12-month fellowship started with two athletic trainers, has expanded to include four and is expected to accommodate six athletic trainers next year.

Like NHMI’s program, Steadman Hawkins fellows also work in an outreach capacity. They must complete a research project. Their experience, however, is focused much more narrowly. Orthopedics is the name of the game at Steadman Hawkins, which sits practically at the base of a ski slope.

“Our busy time is obviously ski season,” Diekmann said. “This is a go-go-go clinic, and our fellows have to keep up. They’re an integral part of how things work here.”

Diekmann said the Steadman Hawkins program attracts 100-130 applicants per year. The salary and perks – full-season ski pass, ski gear, tickets to professional sporting events – make it a popular program. But the experience is what drives the success of the fellowship.

“A lot of our fellows who have come from a traditional setting don’t get to see much surgery,” Diekmann said. “But here, we make it mandatory to see a certain number of hours of surgery. That’s a big part of how their knowledge grows.”

“Also, just gaining experience with a lot of different world-renowned doctors, as far as understanding how they handle different treatments, is invaluable,” he added.

Steadman Hawkins encourages its athletic training fellows to participate fully in the life of the clinic, from covering recreational mountain sports to assisting in the clinic’s role as team physician center for the Colorado Rockies baseball team, the Denver Broncos football team and the U.S. Ski Team.

Additionally, fellows earn extra experience covering the U.S. Ski Team, as well as extra money providing coverage for one of the largest lacrosse tournaments held in the nation.

Education, experience and personality are the major factors that go into selecting Steadman Hawkins fellows, Diekmann said.



Robin Kruger, MS, ATC, OTC, prepares a graft for an ACL surgery while completing an athletic training fellowship at Emory Sports Medicine Center. The program has grown since Kruger participated, administrators say.

“We want to take someone who will really expand their horizons and learn everything the clinic has to offer,” he said. “I would say probably two-thirds of our fellows have stayed in athletic training. Some have gone on in medicine, into physician assistant roles or orthopedic surgery.

“What we try to do,” Diekmann added, “is offer our athletic training fellows a year packed with experience they can’t find in a ‘normal’ job.”

emory sports medicine center

The Emory Sports Medicine Center in Atlanta employs two orthopedic surgeons who completed fellowships at the Steadman Hawkins Clinic. Their director of Athletic Training Services, Forrest Pecha, MS, ATC, CSCS, OTC, also did a fellowship at Steadman Hawkins.

So the idea to create an athletic training fellowship at the Emory Sports Medicine Center seemed like a natural fit.

“The program was in its infancy when I got here 18 months ago,” Pecha said. “We’ve tried to really develop it into a unique opportunity.”

By all accounts, they have succeeded. Emory athletic training fellows must not only hold the ATC credential, they must obtain the OTC credential from the National Board for Certification of Orthopaedic Technologists. This enables the program to offer operating room rotations and build OR skills.

“When all is said and done, they have full scrub privileges here at Emory,” Pecha said. “They’re assisting in surgery, preparing the grafts, suturing skin. It’s really exciting.”

Beginning with two athletic trainers in its first two years, the fellowship now employs four athletic trainers. They get their feet wet during the first month of the year-long program by studying for the NBCOT exam, working with radiologists to learn how to read MRIs, and familiarizing themselves with the physicians in the practice’s sports medicine department – all of whom are fellowship trained.

After that, rotations begin in earnest.

“The rotate every month between our physicians, with one fellow per physician per rotation,” Pecha explained. “They’re responsible for doing physical exams, taking patient histories, ordering X-rays, MRIs or other tests, and then presenting the patient to the physician. They’ll stick with that physician on clinic days and OR days, assisting in the OR.”

At any given time, three of the fellows are in rotation with surgeons while the fourth is working with non-operating physicians.

At the same time, fellows must attend a journal club twice every month, where they must be prepared to discuss current issues presented in a wide host of medical journals. They must also present journal articles themselves.

Research is another primary facet of the fellowship, Pecha said.

“We require them to try to publish, and they must present here at Emory; we’d like them to try to present either at the SEATA conference or at the NATA convention,” he added.

The program tries to mirror post-professional education in medicine, to give athletic training fellows an intense year of clinical work.

“We have grand rounds, we have cadaver rounds, we have journal clubs, we have the research component,” Pecha said. “Our fellows also have outreach opportunities if they want to earn extra money, because our physician group covers Emory University and Oglethorpe University and Georgia Tech. But that’s extracurricular, and

only if they want to. This is a strictly clinical fellowship.”

The athletic training fellowship is a paid position, supported by a grant from Innovation Sports, Inc. Director of Business Development Liddy Lind said the company has a longstanding interest in building sports medicine professions.

“It allows us to be a part of developing an exciting career option for athletic trainers,” Lind explained. “We feel like it brings so much value to the orthopedic practice. It enhances the relationship between the [athletic] trainer and the physician, and it really ultimately helps the patient. It’s a fantastic program.”

Erika Mott, MS, ATC, OTC, one of the current Emory fellows, calls the program a refreshing challenge.

“It’s like a medical residency,” said Mott, who practiced athletic training in a high school for three years before entering the Emory fellowship. “You definitely have to be on your game. Our rotations are always changing, so you’re getting to see different things – but you’re also seeing a whole continuity of care.

“When I’m in there doing an ACL surgery, for example – and I’m actually doing the surgery with the doctor – I look at the person in the recovery room, and then I help progress them and see them post-op five more times. It’s truly an amazing experience.”

Pecha said the fellowship works well because athletic trainers are predisposed to fit naturally within an orthopedic practice. Add the OTC credential, and the possibilities balloon.

“By the time our fellows reach us, they’ve got six years of musculoskeletal evaluation education,” he said. “Our physicians feel that’s invaluable.

“The most important thing to understand is it’s not a glorified internship,” Pecha added. “It’s a true educational experience, and it’s helping the profession of athletic training.” ■■