The responsibility to provide high-quality clinical instruction in athletic training professional-preparation programs is increasing dramatically. Certainly, clinical education is a critical component of all allied medical-education programs, and athletic training is no exception. To succeed in the role of clinical instructor (CI) requires considerable attention to teaching that might not have been included in the CI’s professional education. It is not uncommon to find that allied medical CIs do not have formal preparation in education and have been selected because of their professional skills rather than their teaching abilities (Jarski, Kulig, & Olson, 1990). Although expertise as a clinician is important, it does not guarantee expertise as a CI. In addition, to succeed as a CI requires balancing clinical teaching and patient care. This is undoubtedly a complex task. In this article we identify the characteristics, qualities, and skills presented in the allied-medical-professions literature that are pertinent to developing effective CIs (see the sidebar). The information presented will be useful for athletic training approved clinical instructors (ACIs) and CIs, in general. The abbreviation CI will be used to represent both ACIs and CIs in this article.

**Legal and Ethical Behavior**

Common sense tells us that CIs, as well as all certified athletic trainers, should conduct themselves in a manner that reflects appropriate legal and ethical behavior. This includes abiding by the NATA code of ethics. Of particular importance to CIs is the principle of complying with federal, state, and local laws and regulations governing the practice of athletic training. Most states have a form of regulation (i.e. registration, certification, licensure, or exemption) that affects the role of the certified athletic trainer as CI. Most state licensure
laws include requirements for student supervision, and some define specific responsibilities for athletic trainers in the supervisory role. For example, in the state of Indiana the licensure law (898 IAC-1-1-9) states, “The supervising athletic trainer must maintain a record of each student’s experiential hours” (National Athletic Trainers’ Association [NATA] Education Council, 2002). The state of Ohio (4755-46-02 student athletic trainer) requires that “any documentation written by a student athletic trainer must be countersigned by the supervising athletic trainer” (NATA Education Council). Therefore it is pertinent for CIs to be aware of and abide by the laws for supervision in their respective states.

Effective CIs must also remain in good standing with the National Athletic Trainers’ Association Board of Certification (NATA-BOC). The NATA-BOC requires all certified athletic trainers to obtain a minimum of 80 continuing-education units every 3 years in order to maintain their certification status. Individuals who do not fulfill the continuing-education requirements are placed on probation. Any irresponsible behavior regarding state regulation or NATA-BOC certification would certainly provide a poor professional example for athletic training students.

Communication Skills

Good communication skills are an essential component of being an effective CI and are particularly important in the teaching and learning exchange. CIs should clearly communicate the expectations of the student, as well as the objectives for the clinical experience. This might involve written communication of goals and specific objectives that students should work toward during the experience. When providing constructive feedback on students’ clinical performance, CIs should choose a communication style that is nonthreatening and correct them in a tactful manner while providing a clear, honest perception of their ability (Dunlevy & Wolf, 1992; Emery, 1984; Jarski et al., 1990). CIs should also engage in positive communication that encourages student-teacher dialogue. Demonstrating active listening skills and asking open-ended questions illustrate that the CI has a sincere interest in the student, which positively affects the interaction (Dunlevy & Wolf; Emery; Laurent & Weidner, 2001; Weidner, Trethewey, & August, 1997).

Interpersonal Skills

In conjunction with effective communication the CI should have effective interpersonal skills. Interpersonal skills are conducive to making a student feel valued as a person (Dunlevy & Wolf, 1992), so the CI should approach the teaching/learning process and interaction with students with enthusiasm, friendliness, honesty, and receptiveness (Dunlevy & Wolf; Gjerde & Coble, 1982; Jarski et al., 1990; Mogan & Knox, 1987; Nehring, 1990). These traits demonstrate a genuine interest and concern for students as learners and as people. It should be emphasized that the clinical setting is distinct from the classroom in that it includes patient care. Therefore, it is essential that CIs set an example of sincere interest in their patients, as well as in their students (Gjerde & Coble).

CIs should be aware of their responsibility as role models and mentors for students entering the profession. They should model professional behavior and encourage it in their students at all times during the clinical experience (Anderson, Larson, & Luebe, 1997; Dunlevy & Wolf, 1992; Irby, Ramsey, Gillmore, & Schaad, 1991). Furthermore, CIs should demonstrate respect and relate interpersonally with a wide variety of students and patients of differing gender, race, and ethnicity, as well as different personalities and levels of knowledge.

It is not uncommon in the clinical-education setting for one CI to supervise multiple students in addition to managing patient care. Therefore, it is important for CIs to take an active interest in each student to prevent a student from “getting lost in the crowd.” CIs should try to gain the perspective of each student while interjecting their own perspective on clinical practice (Bauer & Alexander, 1984). Students often feel a high level of anxiety in the clinical setting when faced with challenging or difficult situations. CIs can help ease this anxiety by sharing their own personal experiences and challenges as athletic training students. Encouraging dialogue among student peers can also help reduce anxiety in the clinical setting (Cason, Cason, & Bartnick, 1977). For example, a student might feel overwhelmed by the number and variety of injuries encountered in a clinical rotation involving football. Encouraging students to discuss different injuries that they have worked with facilitates a dialogue that is conducive to learning and...
might decrease student anxiety. Furthermore, certain aspects of the clinical experience can be more stressful for students, such as entering a new clinical rotation or working with a new patient population. Therefore, the CI should encourage and provide feedback when new or difficult clinical situations arise, remaining readily accessible and serving as a resource for students (Gjerde & Coble, 1982; Jarski et al., 1990).

### Supervisory Skills

CIs should demonstrate effective supervisory skills in the clinical setting. The Joint Review Committee–Athletic Training, in conjunction with the Commission on Accreditation of Allied Health Education Programs, has established standards and guidelines regarding direct supervision of athletic training students during their clinical-education experiences. CIs should be aware of and consistently comply with these requirements. Notwithstanding, a CI might need to make a subjective decision, based on the knowledge and experience level of a student, to withhold feedback and supervision in order to promote the student’s confidence and growth in his or her clinical skills.

### Instructional Skills

CIs should demonstrate effective instructional skills during the clinical-education experience. They should have an understanding of teaching and learning styles. CIs should also encourage critical thinking and problem solving and not just simple factual recall (Jarski et al., 1990). They should provide organized and purposeful clinical instruction while using clear educational objectives (Dunlevy & Wolf, 1992; Emery, 1984) and creating a positive teaching/learning environment (Curtis, Helion, & Domsohn, 1998). A positive environment includes creating a learning space that is free of destructive criticism and judgment. CIs should also remain accessible to students when they are faced with challenges and need to ask questions. Even so, they should maintain a balance between providing feedback and fostering student autonomy (Anderson et al., 1997; Irby et al., 1991). When CIs are willing to share their knowledge, experiences, and areas in which they also need to continue to improve, it increases their students’ awareness of the need for lifelong learning (Laurent & Weidner, 2001).

Athletic training is an applied profession in which using principles of adult learning can be helpful when designing clinical-education opportunities. Adult learners bring their own life experiences into the learning equation. They desire educational experiences that allow them to actively engage in learning and problem solving and that provide a direct connection between theory and practical application (Merriam & Caffarella, 1999). CIs should purposely plan opportunities for students to practice technical and problem-solving skills that build on previous classroom and clinical experiences (McGaghie & Stritter, 1989). They should be aware of the topics that are being covered in the classroom in order to recognize “teachable moments” in the clinical setting that will build on theoretical knowledge. For example, an athletic training student enrolled in a therapeutic-modalities course would appreciate the opportunity to make supervised decisions regarding the use of ultrasound, followed by feedback and dialogue with the CI.

In order to further facilitate connections between theoretical content taught in the classroom and practical clinical applications, CIs should create opportunities for critical reflection as a planned feature of clinical education (McGaghie & Stritter, 1989). For example, students might find it helpful to keep a log or journal of their clinical-education experiences to help them reflect on what they have learned and the challenges that they have overcome. The process of planned reflection can also help students identify their own clinical and professional strengths and weaknesses (McGaghie & Stritter). CIs should encourage students to be self-directed in developing a plan to improve in areas they perceive as weaknesses.

Robert Carkhuff’s (1969) skills-based model of teaching has been recommended for instruction in the clinical environment (Bauer & Alexander, 1984). Carkhuff’s model encourages exploration, understanding, and then action. The foundation of this model lies in exploring what students already know, further emphasizing the need for CIs to be up to date on the previous experience, skill level, and current knowledge level of their students. The next step requires CIs to identify and understand the areas of deficiency that prevent students from progressing. Finally, CIs will use this knowledge to actively facilitate student learning. For example, a CI might recognize that a student has
an understanding of the basic principles of rehabilitation, yet the student is “rusty” on functional anatomy of the shoulder. This creates a teachable moment that can direct the CI to teach the student about the complexity of the glenohumeral joint and how it affects the rehabilitation process.

**Evaluation and Assessment Skills**

Assessment of student performance another critical component in clinical education. Feedback is necessary for teaching students appropriate patient care (Ende, 1983). Without feedback, mistakes go uncorrected, good performance is not reinforced, and learning can be compromised.

Evaluation and feedback inform students of their current clinical progress by identifying strengths and weaknesses, as compared with the objectives for a particular clinical-education experience. Evaluation provides CIs with the information necessary to design new learning experiences and to modify existing ones. In addition, evaluation provides academic and clinical information regarding student progress, enabling CIs to assign student grades, determine whether students have attained entry-level competence, and assess the effectiveness of the academic and clinical curricula (Campbell, 1977).

Evaluation procedures and tools should be individualized for each athletic training education program, but the overriding consideration in clinical evaluation is whether or not a student’s level of clinical performance is acceptable. Three fundamental principles should be considered in the evaluation process:

- Essential features of clinical performance must be clearly defined by identifying objectives and expectations in advance.
- Evaluation of clinical performance must be performed on an individual basis.
- The educational objectives, especially those related to clinical performance, must relate to competence in the athletic training profession and not personal biases (Weidner, August, Welles, & Pelletier, 1998).

Both formative and summative evaluations should be incorporated into the evaluation process. Formative evaluation is intended to reinforce, redirect, or correct specific actions or behaviors (Weidner et al., 1998). These evaluations include immediate verbal and written feedback regarding a specific situation. Telling a student that he or she needs to ask the athlete to relax the hamstrings before performing an anterior drawer test is an example of formative evaluation. Formative evaluations should be conducted in a timely manner, allowing the student ample opportunity to improve.

Summative evaluations, on the other hand, are designed to assess a student’s overall clinical performance and professional demeanor and are typically conducted at the midpoint and conclusion of the clinical experience (Weidner et al., 1998). Not only is it important to discuss these evaluations with the student, it is also critical that the evaluations contain no surprises. Specific areas addressed in a summative evaluation should have already been discussed through formal or informal formative evaluations (Weidner et al., 1998). Regardless of the type of evaluation, the evaluation instrument is a key component in providing an accurate assessment of student performance (Draper, 1987). A poorly designed evaluation tool can provide misleading information about a student’s current performance and clinical progress.

**Clinical Competence**

By virtue of holding and maintaining the certified athletic training (ATC) credential, any ATC is clinically competent as defined by the Role Delineation Study: Athletic Training Profession (NATA-BOC, 1999). Even so, competence is also desired in the 12 educational domains of athletic training as designated in the NATA’s Athletic Training Educational Competencies (NATA, 1999; see the sidebar on the next page). CIs should demonstrate clinical competence in the field of athletic training through sound clinical decision making (Curtis et al., 1998) and a systematic approach to problem solving (Emery, 1984). In other words, they should be able to explain to students the basis for their actions and clinical decisions (Gjerde & Coble, 1982), as well as demonstrate the appropriate role of the athletic trainer as a part of the total health-care team (Emery).

**Administrative Skills**

Administrative savvy and the ability to multitask are important skills for effective CIs. Many CIs have respon-
Twelve Domains of Educational Competencies and Proficiencies for Athletic Training Education

- Risk management and injury prevention
- Pathology of injuries and illnesses
- Injury assessment and evaluation
- Acute care of injury and illness
- Pharmacology
- Therapeutic modalities
- Therapeutic exercise
- General medical conditions and disabilities
- Nutritional aspects of injury and illness
- Psychosocial intervention and referral
- Health-care administration
- Professional development and responsibilities

Note. Adapted from National Athletic Trainers’ Association (1999).

Professional Development

CIs have professional-development responsibilities to themselves and to their students. Continuing-education activities should be designed to improve clinical-practice and teaching skills. CIs play an important role in the professional development of their students through mentoring and role modeling. To facilitate this role, they should present students as professionals to other colleagues (Emery, 1984) and help them understand their professional responsibilities in the field, including continuing education and committee involvement (Dunlevy & Wolf, 1992). Students should be encouraged to develop professional contacts through attending state, regional, and national meetings and becoming actively involved in student organizations.

Summary

To succeed in the role of clinical instructor requires considerable attention. CIs can refer to the nine categories of clinical instructor qualities, characteristics, and skills to guide in the preparation for, and evaluation of, the expectations in this role. Effective CIs can enhance the profession by developing students who become skilled and sensitive practitioners.

References


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