

Importance and Applicability of Approved Clinical Instructor Standards and Criteria to Certified Athletic Trainers in Different Clinical Education Settings

By: Thomas G. Weidner and [Jolene M. Henning](#)

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Abstract

Context: For optimal clinical education of athletic training students, Clinical Instructor Educators and program directors need to proactively select, train, and evaluate their Approved Clinical Instructors (ACIs).

Objective: To assess the relative importance and applicability of ACI standards to certified athletic trainers employed in different athletic training clinical education settings.

Design: Respondents rated and ranked the importance and applicability of the 7 standards presented by Weidner and Henning. Crucial standards to warrant dropping an ACI from the clinical education program were also listed.

Setting: Mailed questionnaire.

Patients or Other Participants: A total of 55 program directors invited their ACIs, representing different types of clinical settings, to complete the questionnaire. Of the 399 ACIs who responded, 30 (8%) worked in clinics, 50 (13%) in high schools, and 319 (79%) in colleges or universities.

Main Outcome Measure(s): We compared the mean scores of the importance and applicability ratings and rankings by employment setting. Chi-square analyses were calculated to measure associations between employment settings and whether a standard was crucial. Respondents' comments were also assessed.

Results: No significant differences were noted among employment settings for overall importance and applicability ratings. A difference was seen for only interpersonal relationships, with clinic and high school respondents giving this standard higher importance and applicability ratings than college/university respondents. No associations were shown between the settings and whether a standard was marked as crucial. The importance of a standard and barriers to implementing a standard (particularly ACI role strain) were the most common themes.

Conclusions: The Weidner and Henning standards are considered to be important and applicable across a variety of athletic training clinical education settings. Legal and ethical behavior was considered the most crucial standard. The ACIs seemed to be encountering role strain in their dual roles as clinicians and clinical instructors, a problem warranting further investigation.

Key Words: clinical instruction, Clinical Instructor Educator, athletic training education

Article:

Excellent clinical skills are important for an athletic trainer, but these skills do not guarantee expertise as a clinical instructor. An increasing need has been identified within the profession of athletic training to provide training and development for clinical instructors. The 2001 Commission on Accreditation of Allied Health Education Programs (CAAHEP) Standards & Guidelines for an Accredited Educational Programs for the Athletic Trainer¹ includes a recommendation that certified athletic trainers (ATCs) associated with educational programs complete professional training for their role as clinical instructors. Under the direction of the Clinical Education Subcommittee of the National Athletic Trainers' Association (NATA) Education Council. Clinical Instructor Educator (CIE) seminars were developed and first conducted in June of 2000.² An overriding goal of the seminars is to equip program directors and clinical education coordinators with the information and

resources to serve as CIEs at their respective institutions. The CIEs then train Approved Clinical Instructors (ACIs) to effectively teach and evaluate athletic training clinical proficiencies.

Given that 53% of athletic training professional development is perceived by athletic training students to come from clinical education.³ CIEs and program directors need to proactively select, train, and evaluate their ACIs in order to help ensure that optimal clinical education is taking place. As a result, the clinical segment of athletic training education can be more carefully designed to prepare students to be sensitive and proficient practitioners for physically active individuals.⁴ Without carefully designed and monitored clinical education, students' learning is more likely to be coincidental or to occur by chance.⁵ Such learning is contrary to the purpose and requirements of accreditation, especially regarding the quality of athletic training clinical education.

Recognizing the importance of the clinical instructor in clinical education, Weidner and Henning⁶ recently developed standards (Table I) for the selection, training, and evaluation of ACIs. Before this time, there were no research-based standards and associated criteria for clinical instructors in athletic training or in any medical or allied health field. A panel of athletic training education experts has determined these standards to be necessary, clear, and appropriate. As with the findings regarding standards for clinical education setting,⁷ these standards and criteria should be used as guidelines for forming and shaping an impression about a particular ACI and the requirements of clinical education in general.

Table 1. Approved Clinical Instructor Standards⁶

1. The Approved Clinical Instructor (ACI) demonstrates legal and ethical behavior that meets the expectations of members of the profession of athletic training. (Legal and ethical behavior)
2. The ACI demonstrates effective communication skills. (Communication skills)
3. The ACI demonstrates appropriate and professional interpersonal relationships. (Interpersonal relationships)
4. The ACI demonstrates effective instructional skills. (Instructional skills)
5. The ACI demonstrates effective supervisory and administrative skills when working with athletic training students. (Supervisory and administrative skills)
6. The ACI effectively evaluates athletic training student performance. (Evaluation of performance)
7. The ACI demonstrates clinical skills and knowledge that meet or exceed the athletic training education competencies and clinical proficiencies. (Clinical skills and knowledge)

In order to bring credence and validity to the educational practices of athletic training clinical instructors, members of the profession must establish and investigate expectations for educational practices, rather than simply borrowing and adapting practices from other allied health care professions.⁶ Therefore, the purpose of our study was to assess the relative importance and applicability of the ACI standards recently developed by Weidner and Henning⁶ to ATCs employed in different types of athletic training clinical education settings. In conjunction with this purpose, we addressed the following research questions:

1. Are the proposed standards important and applicable to ACIs in different clinical education settings (ie, college/university athletic training rooms, clinics, and high schools)?
2. Are any of the proposed standards so essential that lack of compliance by an ACI would justify eliminating that individual from the athletic training education program?

The underlying goal of this research was to better meet the needs of students by enhancing the quality of clinical instruction in athletic training, thus preparing more competent practitioners.

METHODS

Respondents

All directors of athletic training education programs accredited by CAAHEP as of September 2003 (N = 214) were solicited via e-mail to coordinate the distribution and collection of a survey questionnaire for ACI standards and criteria. Program directors were asked to complete an "Expression of Interest" form and indicate the number of ACIs utilized by their programs in the clinic, high school, and college/university settings. Of the 63 program directors who initially agreed to participate, 55 (87%) completed all requirements of the research

project. The program directors requested a total of 867 surveys, of which 412 (48%) were returned. Because 13 respondents did not indicate an employment setting that matched 1 of the 3 options, only 399 surveys were analyzed. Respondent (ACI) demographics regarding employment setting, years of experience as an ATC in current type of employment setting, and sex are indicated in Table 2.

Table 2. Participant Demographics (N = 399)

Characteristics	n (%)
Employment setting	
College/university	319 (79%)
High school	50 (13%)
Clinic	30 (8%)
Years of experience in current employment setting	
<1	37 (9%)
1–5	148 (37%)
6–10	112 (28%)
>10	102 (26%)
Sex*	
Male	203 (53%)
Female	180 (47%)

*Not indicated by 16 participants.

Procedures

This study was approved by the Institutional Review Boards at Ball State University and The University of North Carolina at Charlotte. Respondents implied consent by virtue of their completion of the surveys. Participating program directors were mailed a survey packet containing the following items:

1. Letter that explained the purpose, benefit, and responsibility (ie, distribution and collection of survey questionnaires) of participating in the research study.
2. A prepaid, addressed return envelope.
3. ACI survey packets containing the survey questionnaires and a cover letter explaining the purpose and benefit of the study and that participation in the study was voluntary.

The program directors were instructed to distribute the survey packets to all ACIs affiliated with their programs who were employed in clinic, high school, or college/university settings. Program directors were also instructed to collect the completed questionnaires and mail them back in the prepaid, addressed return envelope. The cover letters to the ACIs instructed them to return the completed questionnaires to their program directors within 4 weeks. Both deadline reminders and follow-ups to nonrespondents (through the program directors) were conducted via e-mails and telephone calls.

Instrumentation

The 7 standards and 50 associated criteria (see Table 1 for standards) developed by Weidner and Henning⁶ for the selection, training, and evaluation of ACIs served as the basis of the survey questionnaire. The questionnaire also included demographic questions regarding employment setting, years of experience in that type of employment setting, and sex. Respondents were asked to use a 5-point Likert scale (1 = low, 5 = high) to rate importance and applicability of the 7 standards in their employment setting. The associated criteria for each of the 7 standards⁶ were provided to offer a better understanding of the meaning and intention of the standards but were not rated. By rating each standard, respondents were required to consider each item individually and rate its individual importance and applicability.⁸

We also asked the ACIs to comment on the standards' importance and applicability, in order to gain further insight into the respondents' perspectives on the standards.

Respondents were then asked to rank both the importance (1 = most important, 7 = least important) and the applicability (1 = most applicable, 7 = least applicable) of the standards in their particular athletic training employment setting. By ranking each standard, respondents were required to consider each item in relation to the others.⁸ Finally, the respondents were asked to indicate any standards they believed were "crucial," or essential enough to warrant dropping an ACI from the clinical education program for lack of compliance.

The survey was reviewed for clarity and format by 7 college/university ACIs, and improvements were made accordingly. Because data analyses focused on single items that addressed single concepts, internal consistency measures were not deemed appropriate.

Data Analysis

We calculated a 2-way, mixed-model analysis of variance (ANOVA)⁹ with 1 between-subjects factor (setting) and 1 within-subjects factor (standards) to compare the mean scores of the importance and applicability ratings by employment settings. Mixed-model ANOVA was used as well, to compare the mean scores of the importance and applicability rankings by employment setting. A Huynh-Feldt correction was used whenever the sphericity assumption was violated. We calculated χ^2 analyses to measure associations between employment settings and whether a standard was crucial. We used the Cochran Q test to measure the frequency at which the standards were indicated as crucial. The alpha level was set at .05. The minimum target sample size of respondents from each of the clinical education settings was 30, which yields a power of 0.92 for detecting a large effect. Sample sizes of 25 and 20 yield powers of 0.86 and 0.76, respectively. We analyzed the quantitative data with the Statistical Package for the Social Sciences (version 11.0; SPSS Inc. Chicago, IL). Respondents' comments were analyzed using NUD*IST Software for Qualitative Data (version 6; QSR Intl Pty Ltd. Victoria, Australia).

Table 3. Mean Importance Rankings of Standards*

Rank Order	Standard	Mean Ranking
1	Legal and ethical behavior	2.84
2	Clinical skills and knowledge	3.16
3	Communication skills	3.51
4	Instructional skills	3.65
5	Interpersonal relationships	4.39
6	Student performance evaluation	4.88
7	Supervisory and administrative skills	4.92

*Based on rank order of 1–7 (most important to least important).

Table 4. Mean Applicability Rankings of Standards*

Rank Order	Standard	Mean Ranking
1	Legal and ethical behavior	2.94
2	Clinical skills and knowledge	3.28
3	Communication skills	3.64
4	Instructional skills	3.80
5	Interpersonal relationships	4.24
6	Supervisory and administrative skills	4.71
7	Student performance evaluation	4.77

*Based on rank order of 1–7 (most applicable to least applicable).

RESULTS

Quantitative Analysis

Importance Ratings. The 2-way ANOVA revealed no significant differences among employment settings for overall importance ratings, but the interaction of settings by standards was significant ($\eta = .98$, $F_{11.77,2259.03} = 1.86$, $P = .036$). Post hoc comparisons of the settings for each standard revealed a difference only for interpersonal relationships ($F_{2,384} = 3.32$, $P = .037$), with clinic (4.85) and high school (4.84) respondents having higher importance ratings for this standard than college and university respondents (4.68). When assessing importance, a main effect was noted for the standards ($\eta = .98$, $F_{5.88,2259.03} = 12.41$, $P < .001$). The Bonferroni t post hoc test established that the following standards (indicated by their key words, see Table 1) had the highest importance ratings: legal and ethical behavior (4.88), interpersonal relationships (4.79), communication skills (4.78), and clinical skills and knowledge (4.76). Although the following standards were rated lower, the mean

scores still indicated a high level of importance: instructional skills (4.67), student performance evaluation (4.61), and supervisory and administrative skills (4.55).

Applicability Ratings. The 2-way ANOVA showed no significant differences among employment settings for overall applicability ratings, but the interaction of settings by standards approached statistical significance ($\eta = .92$, $F_{11,03,2112.99} = 1.72$, $P = .064$). When applicability was assessed, a main effect was seen for the standards ($\eta = .92$, $F_{5,52,2112.99} = 17.39$, $P < .001$). The Bonferroni t post hoc test indicated the highest applicability ratings for legal and ethical behavior (4.74), interpersonal relationships (4.69), clinical skills and knowledge (4.53), and communication skills (4.48). Although their mean scores still indicate a relatively high level of applicability, student performance evaluation (4.37), supervisory and administrative skills (4.34), and instructional skills (4.21) were rated lower than the other standards.

Importance and Applicability Rankings. Results of the 2way ANOVAs for the mean rankings were generally similar to the mean ratings (Tables 3 and 4). Main effects for the mean rank of the importance of standards ($\eta = .90$, $F_{5,39,2122.66} = 37.09$, $P < .001$) and applicability of standards ($\eta = .91$, $F_{5,44,2125.57} = 26.30$, $P < .001$) were found. No main effects for settings were found for the mean rank of importance or applicability. An interaction of the mean rank of importance was found for setting and standards ($\eta = .90$, $F_{10,78,2122.66} = 2.03$, $P = .024$). Post hoc comparisons of the settings for each standard revealed a difference for legal and ethical behavior ($F_{2,394} = 3.93$, $P = .020$), with ACIs in the clinic (3.17) and college/university (2.93) settings giving lower rankings to this standard than those in the high school setting (2.10). Differences among the settings were also found for supervisory and administrative skills ($F_{2,394} = 3.28$, $P = .039$), with ACIs in the clinic settings ranking this less important (5.63) than those in colleges and universities (4.81) and high schools (5.00). No interaction was found for mean applicability rankings.

Crucial Ratings. The rate at which the standards were indicated to be crucial across the 7 standards was statistically different based on the Cochran test ($Q = 340.13$, $df = 6$, $P < .001$). The legal and ethical behavior standard was considered the most crucial by 92% of the respondents. Clinical skills and knowledge (74%) and interpersonal relationships (68%) were more crucial than the remaining standards. The other standards (instructional skills [57%], student performance evaluation [54%], communication skills [53%], and supervisory and administrative skills [53%]) were indicated as crucial at lower rates but were still endorsed by more than half the respondents. The results of a series of χ^2 analyses did not demonstrate any associations between the settings and whether the standard was marked as crucial.

Qualitative Analysis

Qualitative comments were collected to gain further insight into the respondents' perceptions of the 7 standards. This was an important aspect of this study, as the standards being validated had been originally developed by program directors and not ACIs. We did not have a preconceived idea that strong themes would emerge from this data. However, coding of the qualitative comments revealed several common themes and subthemes for each of the standards. Themes were identified when at least 5 comments were coded with similar concepts. The importance of a standard and barriers to implementing a standard were the 2 most common themes. The coded themes with supporting sample comments for each standard are provided in Table 5.

DISCUSSION

The Weidner and Henning⁶ ACI standards examined in this research are considered universally important and applicable by ACIs in various clinical education settings (ie, clinics, high schools, and college/university athletic training rooms). In particular, legal and ethical behavior, communication skills, interpersonal relationships, and clinical skills and knowledge standards are considered the most important, applicable, and crucial. A large majority (92%) of the respondents reported that unsatisfactory legal and ethical behavior would justify eliminating the ACI from the clinical education program. Comments from the respondents provide ample additional support for the importance and applicability of the standards. However, the respondents did recognize practical barriers (eg, role strain, time demands) to the full implementation of the standards.

The Weidner and Henning⁶ research-based standards and associated criteria could be used by CIEs to employ in selecting, training, and evaluating ACIs. The ACIs can use the standards and criteria as points of reflection on their current educational practices and to develop plans of action for the modification of those practices. The standards and criteria can also serve as the foundation for the evaluation of teaching practices by athletic training students and clinical instructor colleagues.

For these purposes, related CIE, ACI, and student forms have been developed to serve as models for the selection, training, and evaluation of ACIs employed in various clinical education settings (www.nataec.org).⁹⁻¹¹ What follows is a presentation of the ACI standards and criteria and their application in clinical education. Although the focus is on the ACI, it is understood that the program director and CIE also have critical roles and responsibilities in effectively implementing these standards.

Legal and Ethical Behavior

Acting as a role model, the ACI needs to hold the appropriate credential (National Athletic Trainers' Association Board of Certification [NATABOC] certification and state license, registration, certification, or exemption, if applicable) as required by the state in which the individual provides athletic training services. The ACI should also provide athletic training services that are defined by the BOC *Role Delineation Study*¹² and that are within the scope of the respective state practice act (if applicable). These athletic training services need to be consistent with state and federal legislation. Examples include equal opportunity and affirmative action policies, the Americans with Disabilities Act, the Health Insurance Portability and Accountability Act, and the Family Educational Rights and Privacy Act. Finally, the ACI should demonstrate ethical behavior as defined by the NATA Code of Ethics¹³ and the NATABOC Standards of Professional Practice.¹⁴ This standard was viewed as the most crucial across all settings. Perhaps because athletes are minors in the high school setting, this standard was particularly important to model in the high school setting.

Communication Skills

The ACI needs to communicate with the program director and/or clinical education coordinator regarding athletic training students' progress toward clinical education goals at regularly scheduled intervals determined by the athletic training education program. These skills include using appropriate forms of communication to clearly and concisely express himself or herself to athletic training students, both orally and in writing. Appropriately timed and constructive formative (ie, ongoing specific feedback) and summative (ie, general overall performance feedback) feedback to athletic training students is also essential in this communication.

In particular, the ACI should facilitate communication with athletic training students through open-ended questions and directed problem solving. Time should be set aside to ensure ongoing professional discussions with the athletic training student in the clinical setting. This communication should be nonconfrontational and positive. The ACI will also receive and respond to feedback from the program director and/or clinical education coordinator, as well as athletic training students. Given the role strains and time demands identified by the respondents that are associated with serving as both clinicians and clinical instructors, ACIs may find optimal communication to be particularly difficult.

Interpersonal Relationships

The ACI needs to have an open and approachable demeanor toward athletic training students when working in the clinical setting. Appropriate, professional relationships should be formed with these students. Recognizing that students also play a part, the ACI should serve as a positive role model or mentor in this relationship. Further, the ACI needs to model appropriate and professional interpersonal relationships when interacting with other athletic training students, colleagues, patients and athletes, and administrators. The ACI should also be an advocate for athletic training students when interacting with these individuals. Certainly, the ACI should demonstrate respect for gender, racial, ethnic, religious, and individual differences when interacting with people. Perhaps because of the diverse patient population in the clinic setting and athletes who are minors in the high school setting, this standard was considered particularly important and applicable in these settings.

Table 5. Themes and Subthemes for Standards*

Standard	Theme	Subtheme	Supporting Comments
Legal and ethical behavior	Importance of the standard	None	<p>"Vital components to overall success of program."</p> <p>"This is so important to us—gaining credibility with other health care professions."</p> <p>"Very important and applicable because we are models to our students who are going to be entering the profession."</p> <p>"Almost more important to have role models that exhibit this than to try and 'teach' the values."</p>
Communication skills	Importance of the standard	None	<p>"ACI and student interaction and establishing open channels of communication are critical to the educational experience."</p> <p>"Communication is a vital aspect of all venues of athletic training and should be stressed with ACIs."</p>
	Barriers to implementation	Role strain	<p>"With a 70-hour work week, these added duties, without compensation, are physically and emotionally taxing."</p> <p>"The ACI can only do so much. It's up to the student to take initiative."</p> <p>"It is sometimes difficult to effectively communicate with ATS while monitoring/working with multiple athletes."</p> <p>"Time is an issue."</p>
Interpersonal relationships	Importance of role modeling	None	<p>"We are the first athletic trainer that most of our students have contact with. It is critical that we set the standard high for behavior, communication, and professional relationships."</p> <p>"AT students must see ACIs working in [a] professional manner and [the] ACI must have effective and strong relationships with [the] staff and athletes."</p>
	Barriers to implementation	None	<p>"Difficult to correct problems with this criteria in ACIs."</p> <p>"This is important; however, this is not always an aspect that the ACI can control."</p> <p>"There needs to be a more fully developed definition of 'appropriate' and 'professional.' Too often, I find that what has been deemed 'appropriate' in one clinical setting is considered inappropriate in another. Guidelines/recommendations should be specifically laid out by our institution."</p>
Instructional skills	Importance of the standard	None	<p>"The students need proper instruction to improve their skills."</p> <p>"Every teacher has their own style and every student has their own learning style so it is important to find the combination that fits best and will allow for learning."</p> <p>"ACIs have a lot to contribute to a student's education. They will be able to teach students things not covered in the didactic portion [of the program]."</p> <p>"The more education and training an ACI receives, the more effective he/she will be."</p>
	Barriers to implementation	Role strain	<p>"How can we meet that criterion with our work schedule?"</p> <p>"Not all of these criteria can be applied by ACIs. These 13 alone are a full-time job."</p> <p>"Teaching vs. 'getting the work done'? Teaching is generally a low priority to ACIs but should be higher."</p> <p>"My job requires that the athletes are my first priority."</p> <p>"Not always possible—lots of athletes, not enough time."</p> <p>"We have no idea what level the students are at when they come to the clinic."</p> <p>"ACIs need more direction from the program director and clinical education coordinator."</p> <p>"Sometimes it's hard for ACIs to know exactly where students are when they don't teach classes. So it can be hard to know what to teach."</p>
Supervisory and administrative skills	Barriers to implementation	Role strain	<p>"Hard to watch every student at all times and still do your job."</p> <p>"Time constraints with other ATC responsibilities."</p> <p>"Adds a lot of paperwork."</p> <p>"Hard to do at times due to busyness of [athletic] training room."</p> <p>"Hard with a lot going on."</p>
Student performance evaluation	Importance of the standard	None	<p>"I believe this is the most important function of the ACI."</p> <p>"Feedback is crucial to greater student understanding."</p> <p>"This is critical for growth of the student."</p> <p>"This helps monitor the transition from 'book smart' to 'street smart.'"</p>
	Barriers to implementation	Role strain	<p>"Difficult when being an ACI is not part of the job description and no compensation is involved."</p> <p>"Time constraints and too many students to supervise."</p> <p>"Time is full with many duties—this can be tough."</p> <p>"Time issues."</p>

Table 5. Continued

Standard	Theme	Subtheme	Supporting Comments
Clinical skills and knowledge	Importance of the standard	None	<p>"This is a must. If we aren't current and more knowledgeable than our students there is a problem."</p> <p>"Very important! The number one criteria when choosing an ACI."</p> <p>"Goes without saying."</p>
	Barriers to implementation	Lack of continuing education	<p>"Many of the competencies/proficiencies are above and beyond what many of us were taught. It is hard to keep up."</p> <p>"Difficult in such a rapidly expanding proficiency pool."</p> <p>"There are very few good CEUs for [maintaining clinical skills and knowledge]."</p>

*ACI indicates Approved Clinical Instructor; ATS, athletic training student; AT, athletic training; and CEUs, continuing education units.

Instructional Skills

The ACI helps athletic training students progress toward meeting the goals and objectives of the clinical experience as assigned by the program director and/or clinical education coordinator. This may include collaborating with the program director and/or clinical education coordinator to plan learning experiences for students and involve implementing, facilitating, and evaluating the planned learning experiences with these students. In this process, the ACI needs to be flexible and take advantage of teachable moments during planned and unplanned learning experiences by teaching skills or content that is meaningful and immediately applicable.

To best accomplish these goals, the ACI needs to understand the athletic training students' academic curriculum, level of didactic preparation, and current level of performance relative to the goals of the clinical education experience. This may include modifying learning experiences based on the athletic training students' strengths and weaknesses. Certainly, the ACI needs to be able to communicate complicated and detailed concepts in terms students can understand based on their level of progression within the athletic training education program. In order to meet the needs of different learners, the ACI should employ a variety of teaching styles. The ACI needs to create learning opportunities that actively engage athletic training students in the clinical setting and that promote problem solving and critical thinking. The ACI should encourage self-directed learning activities for the athletic training students when appropriate, so that students do not become overly dependent on assistance. The ACI would do well to encourage athletic training students to engage in self-directed learning as a means of establishing lifelong learning practices of inquiry and clinical problem solving. Very importantly, the ACI needs to be enthusiastic about teaching athletic training students and should perform regular self-appraisal of his or her teaching methods and effectiveness. The ACIs clearly commented on the importance of this standard but once again noted the difficulty in its implementation.

Supervisory and Administrative Skills

The ACI needs to present clear performance expectations to athletic training students at the beginning of and throughout the learning experience. In accordance with CAAHEP standards,¹ the ACI must also directly supervise athletic training students during the formal acquisition, practice, and evaluation of the entry-level athletic training clinical proficiencies. At all times, the ACI must be able to intervene on behalf of the athlete or patient when the athletic training student is putting that individual at risk or harm.¹ When appropriate, though, the ACI should encourage athletic training students to arrive at clinical decisions on their own, according to their level of education and clinical experience. The ACI should provide additional feedback to athletic training students from information acquired from direct observation, discussion with others, and review of athlete or patient documentation.

The ACI would do well to collaborate with athletic training students to arrange quality clinical education experiences that are compatible with the students' academic schedules. Ultimately, the ACI treats the athletic training students' presence as educational and not as a means for providing medical coverage.

Various administrative interrelationships exist among the ACI, student, setting, and academic program and require attention. The ACI needs to apply the clinical education policies, procedures, and expectations of the athletic training education program. Additionally, the ACI needs to inform athletic training students of relevant policies and procedures of the clinical setting. The ACI is also expected to complete the athletic training students' evaluation forms requested for the athletic training education program in a timely fashion. The ACI will need to provide the program director and/or clinical education coordinator with requested materials as required for the accreditation process. Once again, given the role strains and time demands identified by the respondents that are associated with serving as both a clinician and clinical instructor, the ACI may find optimal supervision to be difficult. Perhaps because of the more controlled environment in the clinic setting, this standard was viewed as less important there.

Evaluation of Performance

The ACI needs to note the athletic training students' knowledge, skills, and behaviors as they relate to the specific goals and objectives of their clinical experiences. This includes recording student progress during the

clinical experience based on performance criteria established by the athletic training education program. Areas of competence as well as areas that require improvement should be identified. The ACI needs to approach this evaluation process as constructive and educational and use formative and summative evaluations. When an athletic training student needs remediation, the ACI should communicate with the program director and/or clinical education coordinator in a timely manner. When appropriate, the ACI should communicate with the program director and/or clinical education coordinator regarding implementing or clarifying the athletic training education program's performance evaluation instruments. Respondents acknowledged once again the difficulty associated with implementing this standard.

Clinical Skills and Knowledge

The ACI's knowledge and skills need to be current and support care decisions based on science and evidence-based practice. The ACI needs to be capable of teaching and evaluating the clinical proficiencies that may be particular to the setting or environment (eg, clinic, high school) as well. Certainly, the ACI will be expected to maintain his or her clinical skills and knowledge in the variety of athletic training domains to accomplish this task.

CONCLUSIONS

The Weidner and Henning standards for the selection, training, and evaluation of ACIs are considered universally important and applicable across a variety of athletic training clinical education settings. Legal and ethical behavior was considered the most crucial standard among the respondents to the survey. These 7 standards and associated criteria should be used as guidelines in selecting, training, and evaluating ACIs. Further, they can assist the CIE and ACI in developing an understanding of the requirements of clinical education in general. The ACIs seem to be encountering role strain as a result of their dual roles as clinicians and clinical instructors, a problem warranting further investigation.

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