Assessing Clinical Proficiencies

Overview:

The National Athletic Trainers’ Association Education Council has identified a knowledge and skill base, which it believes is necessary for a person to possess in order to function as an entry-level certified athletic trainer. The knowledge and skills base has been termed as the “educational competencies and clinical proficiencies”. The educational competencies (“competencies”) make up the content that educational programs are to use in developing the curriculum and educational experiences for students. The clinical proficiencies (“proficiencies”), define the common set of skills that entry-level athletic trainers should possess. The 4th edition of the document titled “Athletic Training Educational Competencies” is used as the basis for this competency and proficiency manual. Both the competencies and proficiencies are derived through information gathered by the NATA’s Role Delineation Study (5th ed), which identifies the six domains of athletic training:

1. Prevention
2. Clinical Evaluation and Diagnosis
3. Immediate Care
4. Treatment, Rehabilitation, and Reconditioning
5. Organization and Administration
6. Professional Responsibility

The competencies and proficiencies related to the six domains of athletic training have been further organized into 12 content areas:

1. Risk Management and Injury Prevention
2. Pathology of Injuries and Illnesses
3. Orthopedic Clinical Examination and Diagnosis
4. Medical Conditions and Disabilities
5. Acute Care of Injuries and Illnesses
6. Therapeutic Modalities
7. Conditioning and Rehabilitative Exercise
8. Pharmacology
9. Psychosocial Intervention and Referral
10. Nutritional Aspects of Injuries and Illnesses
11. Health Care Administration
12. Professional Development and Responsibility

Within each domain, there are competencies classified as “cognitive”, “psychomotor”, and “clinical proficiencies”. Cognitive competencies address knowledge and intellectual skills. Psychomotor competencies deal with manipulative and motor skills. Clinical proficiencies deal with decision-making and skill integration. The Commission on Accreditation of Athletic Training Education Programs (CAATE) requires educational programs to teach and assess each of the educational competencies and clinical proficiencies.
**Guidelines**

- If you have any questions of what needs to be done in order to complete an educational proficiency, please see an ACI or contact the Clinical Coordinator or Program Director.

The information that is needed for the students to complete the competencies and proficiencies is provided in the classroom and laboratory. The assessment of the competencies is also conducted in the classroom and laboratory. Since the proficiencies deal with the application of a combination of skills, the assessment of the proficiencies is primarily conducted in the clinical setting. In appropriately applying the knowledge, skills, and attitudes in the clinical setting, the student will demonstrate his / her ability to perform the common set of clinical skills required of an entry-level athletic trainer. The proficiency assessment is associated with the course – KIN 140 Practicum in Athletic Training. There are six different practicum courses, one for each level in the ATEP. A prescribed set of proficiencies is assigned to each practicum course, based on the level of the student and the coursework that the student has completed.

The primary goal in assessing the educational proficiencies is to evaluate the student’s ability to successfully apply the cognitive, psychomotor and affective competencies while demonstrating their clinical decision making skills. For example, if the clinical proficiency challenges the student to “...demonstrate a musculoskeletal assessment of upper extremity, lower extremity, head/face, and spine...” (Orthopedic Clinical Examination and Diagnosis Clinical Proficiency), the student’s overall ability to perform an assessment or evaluation and to arrive at an appropriate diagnosis is the key. The student would (a) demonstrate his / her knowledge and intellectual skills (cognitive domain) by obtaining an appropriate history, deciding which special tests to use, determining the injury or illness and plan of action, etc.; (b) perform the motor skills associated with the inspection, palpation and special test techniques (psychomotor domain); (c) demonstrate his / her attitudes and values (affective domain) during the assessment by interacting with the patient, showing concern and understanding, etc.; and (d) arrive at an appropriate diagnosis. One can see how this global ability to integrate the cognitive, psychomotor, and affective domains allows a student to demonstrate his or her proficiency in assessing an injured or ill patient more so than having the student perform a series of individual components or sub-skills.

Often, what the student does not perform is as important as what he / she does perform. For example, if a student was asked to evaluate a patient with a potential cervical spine injury and based on the history, inspection / observation, and palpation the student suspects that the person may have suffered a fractured vertebrae that is compromising the spinal cord, the assessment should not continue and the student should take appropriate actions based on the assessment at hand. The student would have demonstrated his or her “proficiency” on evaluating the cervical spine. However, if the student just performed each sub-skill without putting things together, he or she may have asked the athlete to flex his or her neck or the student may have performed a compression test on the injured person because those things should be included in a “generic assessment”. Based on the
situation, both of those actions would have been incorrect to perform and may have caused the injured person harm. If the student had asked the injured person to move his or her neck or had the student performed a compression test, the student would have demonstrated that he or she is NOT “proficient” in evaluating the cervical spine.

Continuing with this example, one can see that the student whom correctly identified a potential cervical spine injury and therefore took action did not complete many of the sub-skills that could be associated with a full clinical examination even though he / she demonstrated his / her “proficiency” in evaluating the cervical spine. The ACI could then ask the student to perform the sub-skills that the student did not perform, after the assessment has been concluded. If this scenario was a mock situation, the ACI could ask the student to perform a range of motion assessment, or continue with the special test portion to challenge the student’s skills and knowledge. The ACI could also provide different feedback on behalf of the model and ask the student what he or she would do differently. Again this challenges the student’s ability to integrate the cognitive, psychomotor and affective domains. If a real injury was used to assess the student’s proficiency, the ACI could have the student come back at a later time to go over another scenario that incorporates more of the sub-skills in order to ensure that the student has mastered those sub-skills also. Another option would be to have the student repeat a clinical examination on another patient or scenario.

In order to be judged “competent and proficient”, the student should demonstrate that they are able to safely, effectively, and efficiently perform the objective without the need of assistance or prompting from an ACI. This is done both verbally and physically. The student may need to demonstrate his / her cognitive skills by explaining what he/she is doing or why he/she is doing it. The physical skills would need to be performed by the student as well. For example, the student could state why he/she is performing a Lachman test, what constitutes a positive test and whether or not the patient had a positive test all while actually performing the Lachman test. The ACI could also ask the student questions about the Lachman test or the ACL during the assessment to challenge the student’s knowledge and skills.

Forms

Forms to assist the ACI’s with “grading” the student in a consistent manner and to provide feedback have been developed for many of the proficiencies. These “skills test sheets” are located on the ATEP website (http://www.edb.utexas.edu/atep/proficienciespage.htm). An example is provided below:
If the proficiency has a skills test sheet associated with it, the student is responsible for bringing that sheet to the ACI during the proficiency assessment. These forms MUST BE COMPLETED by the ACI. When viewing the “proficiency completion log”, the left hand column lists the proficiencies that are to be completed. An asterisk is located after the proficiency number indicating a skills test sheet is required. If there is no asterisk, then there is not an associated skills test sheet for that proficiency. An example is provided below:

<table>
<thead>
<tr>
<th>Proficiency</th>
<th>Signature</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Exam of the:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.1 shoulder*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.2 knee*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.3 posture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.4 neuro</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the example above, the first two proficiencies would require the completion of the skills test sheet as indicated by the asterisk. The last two proficiencies would not require a skills test sheet as there is no asterisk.
It is the student’s responsibility to submit a copy of the skills test sheet to the ACI at the time of the clinical proficiency assessment. The ACI is to fill-out the form, discuss the student’s performance with him / her after the proficiency assessment is completed, sign the form, have the student sign the form, and give the form to the student. **STUDENTS ARE TO KEEP ALL OF THE SKILLS TEST SHEETS IN THEIR CLINICAL ROTATION BINDER!**

The following scale is used to “grade” the proficiency:

- **0**: unable to perform the skill safely and effectively. Should not be allowed to perform the skill in the clinical setting. Must repeat this proficiency evaluation.

- **1**: able to perform the skill safely and effectively with prompting from an ACI. Should be allowed to perform the skill in the clinical setting with close supervision and assistance. Must repeat this proficiency evaluation.

- **2**: able to perform the skill safely and effectively without prompting or assistance from an ACI. Should be allowed to perform the skill in the clinical setting without the need for close supervision. Need not repeat this proficiency evaluation.

If the ACI determines that the student has successfully completed the proficiency assessment, indicated by the student receiving a grade of “2”, the ACI will also sign and date the student’s proficiency completion log in the appropriate columns. This signifies that the student has proven his / her proficiency in that area and may use the knowledge and skills associated with that proficiency in the clinical setting. An example is provided below:

<table>
<thead>
<tr>
<th>Proficiency</th>
<th>Signature</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Exam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.1 shoulder*</td>
<td>Brian Farr</td>
<td>10/10/10</td>
<td>Good job with special tests and palpation</td>
</tr>
<tr>
<td>2A1.2 knee*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.3 posture</td>
<td>Brian Farr</td>
<td>10/10/10</td>
<td>Remember definitions</td>
</tr>
<tr>
<td>2A1.4 neuro</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the ACI determines that the student has not proven proficiency, indicated by the student receiving a grade of “0” or “1”, then the ACI will indicate so on the skills test sheet. The ACI will also note that the student must be re-tested by the same ACI by writing a note under the “comments” section of the proficiency completion log. The ACI will NOT sign the signature section of the student’s proficiency completion log, however, since the proficiency has not been completed. An example is provided below:

<table>
<thead>
<tr>
<th>Proficiency</th>
<th>Signature</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Exam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.1 shoulder*</td>
<td></td>
<td></td>
<td>Must see Brian Farr again</td>
</tr>
<tr>
<td>2A1.2 knee*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.3 posture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A1.4 neuro</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
The student will then be required to repeat the proficiency assessment at a later date. The student should bring the original skills test sheet (in addition to a new blank copy) with him/her to the second proficiency assessment meeting so that the ACI can compare performances and note areas improvements or regression. The student must repeat the proficiency assessment until the ACI determines that the student has successfully completed the clinical proficiency. Once the proficiency has been completed adequately, the ACI will sign the student’s proficiency completion log and the student may begin to use the skills and knowledge associated with the proficiency in the clinical setting. Students are to follow up with the same ACI for successive assessments of the same proficiency.

**Procedures**

The evaluation of clinical proficiencies can occur in two ways. The first is when an ACI presents an actual patient in need of care to the student. The student, under direct supervision (“constant auditory and visual interaction between the ACI and the student”) may use this time to demonstrate his / her clinical proficiency by aiding the patient. If the ACI determines that the student has demonstrated clinical proficiency, then the ACI will “sign-off” on that clinical proficiency. “Signing-off” a clinical proficiency is when an ACI signs his / her name to the students proficiency log, indicating that the ACI witnessed the student’s clinical proficiency and that the proficiency was performed at an acceptable level. From that point on, the student may apply that clinical skill on patients under the supervision of a credentialed health care provider. The second way in which a student can prove his / her clinical proficiency is by setting up an appointment with an ACI at which time, the ACI will provide a mock situation for the student. The student will act as if the ACI or a subject is the patient. The student will demonstrate his / her clinical proficiency under an ACI’s direct supervision. If successful, the ACI will sign-off the proficiency and the student may apply that clinical skill on patients under the supervision of a credentialed health care provider. If a student is unsuccessful in demonstrating his/her clinical proficiency, the ACI will not sign-off the proficiency and the student must repeat the session (either real or mock) before applying the clinical skills associated with the clinical proficiency, as explained earlier. In order for a student to be deemed “proficient”, he/she must demonstrate, without assistance or prompting, the ability to apply his/her knowledge, skills, and attitudes in a manner that suggests that he/she could be trusted to perform the skill safely and effectively in a clinical setting without supervision. The goal is that the “proficient” student should have the ability to apply the clinical skills safely, effectively, and efficiently in the absence of a supervisor, however, the reality is that the student in the clinical setting must be supervised at all times.

Students may not perform the skills associated with the clinical proficiencies, in the clinical setting, until they have met with an ACI and proved their competence / proficiency by having that objective “signed-off”. After having a skill “signed-off”, a student may perform that skill in the clinical setting under the supervision of a clinical instructor / supervisor.
Proficiency Levels

Students are classified into different levels depending on the courses that they have completed. The levels are as follows:

Level 1A = students in their first semester in the program who have completed
KIN 219K – Introduction to Athletic Training, KIN 312 Care & Prevention
of Athletic Injuries, KINN 324K Applied Human Anatomy, and CC 306M –
Introduction to Medical and Scientific Terminology

Level 1B = students in their second semester in the program who have completed
KIN 341 – Therapeutic Modalities in Athletic Training in addition to
courses associated with the previous levels

Level 2A = students in their third semester in the program who have completed
KIN 342 – Clinical Evaluation of Athletic Injuries to the Lower Body, KIN
343 – Clinical Evaluation of Athletic Injuries to the Upper Body, and KIN
320 Applied Biomechanics of Human Movement or KIN 326K –
Kinesiology: Biomechanical Analysis of Movement in addition to courses
associated with the previous levels

Level 2B = students in their fourth semester in the program who have completed
KIN 344 – Therapeutic Exercise and Rehabilitation, KIN 119 –
Conditioning, and KIN 325K Physiology of Exercise in addition to courses
associated with the previous levels

Level 3A = students in their fifth semester in the program who have completed
KIN 345 – Topics in Athletic Training and KIN 330 Sports Nutrition or
NTR 306 Fundamentals of Nutrition in addition to courses associated with
the previous levels

Level 3B = students in their sixth semester in the program who have completed
KIN 346 – Administration of Athletic Training Programs in addition to
courses associated with the previous levels

These classifications are used to distinguish which proficiencies are to be completed by
the student. Each level of students has a list of clinical proficiencies that must be
completed as one of the requirements associated with their KIN 140 Practicum in
Athletic Training course. Failure to complete the assigned proficiencies will result in the
student receiving a lowered grade for the Practicum course and may result in the student
being placed on probation, being suspended, or being dis-enrolled from the program. The
proficiencies associated with each level are based on the courses that the student
completed in the previous semester. For example, Level 1A students will complete a set
of proficiencies based on the course content presented in KIN 312, KIN 219K, CC 306M,
and KIN 324K. Students will be provided with information and instruction that assists
them in obtaining the knowledge, skills, and attitudes to complete the clinical
proficiencies in the classroom and/or laboratory. The student will have the rest of that
semester to work on perfecting his/her knowledge, skills and attitudes in order to
demonstrate clinical proficiency. During the following semester, evaluation of the clinical
proficiencies takes place when the student meets with an ACI to complete the proficiency assessment. For example, students will enroll in KIN 219K Introduction to Athletic Training in the spring semester of their freshman year. The students will have that semester to work on perfecting the knowledge and skills learned in the course. The students will then prove their proficiency during the following semester - fall semester of their sophomore year. During a proficiency assessment, the student is asked to demonstrate his/her ability to apply his/her knowledge, skills, and attitudes in the clinical setting. If the student is able to successfully demonstrate the ability to do so (i.e. demonstrate proficiency) he/she can then use those clinical skills and abilities in the clinical setting, on actual patients, under the supervision of a credentialed health care provider. A list of the proficiency group levels and the clinical proficiencies associated with each level can be found on the A.T.E.P. website at http://www.edb.utexas.edu/atep/proficienciespage.htm

The classification levels also provide the ACI and clinical instructors (CI) with a general idea of which clinical skills the students can perform in the clinical setting and which clinical skills are to be developed during the student’s clinical rotations. Students may not perform clinical skills until they have received formal instruction and evaluation of the clinical skills. In categorizing students by level, ACIs and CIs will have a basic knowledge of what each student is able to do in the clinical setting. For example, a level 1A student will not be able to design and monitor a rehabilitation protocol because they have not completed the appropriate course and therefore, have not proven their competency and proficiency in the knowledge, skills, and attitudes associated with designing and monitoring a rehabilitation program. Students and their ACI/CI must communicate so that the student is not asked to perform and does not perform a clinical skill that he/she has not been cleared to do, even if the skill is listed in the student’s proficiency list. For example, a level 1A student has completed KIN 219K and therefore has learned how to tape an ankle. Although the student may have the knowledge, skills and attitude to successfully tape an ankle, he/she may not tape the ankle unless he/she has proven his/her proficiency. In this situation, the ACI could either request that another student that has shown his/her proficiency tape the ankle or the ACI could use this opportunity to allow the student to demonstrate his/her proficiency on the patient. If the ACI is to allow the student to demonstrate his/her proficiency, the ACI must provide direct supervision while assessing the student’s performance. If the student was successful in demonstrating his/her proficiency, then the ACI could sign-off on that proficiency and the student would be able to tape ankles from that point on as long as he/she continues to do so at an acceptable level. If the student was not able to demonstrate his/her proficiency at taping an ankle, the student would be required to prove his/her proficiency at another time and the student would not be permitted to tape patients’ ankles until the student demonstrated proficiency at doing so.

**Learning Over Time**

The ultimate goal is for the student to “master” both the educational competencies and clinical proficiencies in order to become an entry level Certified Athletic Trainer. Learning over time (LOT) helps to accomplish this. Learning over time, defined as
“sequenced, integrated, depth of learning” begins with introductory competencies (i.e. basic knowledge, skills and behaviors) that are taught and tested in the classroom and laboratory. The student’s knowledge and skills are then tested again during the proficiency assessments. After demonstrating a satisfactory level of knowledge and skill, the student can begin to employ that knowledge and skill set into his/her clinical experiences. The student should continue to refine his/her clinical skills and knowledge, even after having the proficiency “signed-off” by an ACI. While refining his/her skills, the student should receive on-going feedback and instruction from his/her ACI/CI. Essentially a cycle of learning, receiving feedback, and refining the skills should be repeated until the student “masters” the knowledge and skills required to become an entry level Certified Athletic Trainer.

The basic concept of LOT has been built into the curriculum and clinical proficiency assessment, but it is imperative that the student continues to work on improving his/her knowledge and skills throughout his/her time in the ATEP. It is also imperative that the student’s ACI/CI provide on-going feedback on the student’s application of his/her knowledge and clinical skills when interacting with patients.