DEPARTMENTAL PLAN FOR ASSESSMENT OF STUDENT LEARNING
2015-2016 ACADEMIC YEAR

Department: Sports Medicine

Program: Athletic Training (Bachelor of Science in Athletic Training)

Mission Statement: Department of Sports Medicine provides academic and clinical education for the Athletic Training Program culminating in Bachelor of Science in Athletic Training degree at University of North Dakota. The program develops athletic trainers who are effective communicators among patients and family members, healthcare professionals, and associated personnel. In addition to competence in athletic training knowledge, skills, and disposition, the Program strives to develop students’ medical decision making, life-long learning, and effective problem solving abilities in sports medicine.

Background Information: University of North Dakota’s Athletic Training Program is administered by the University’s Department of Sports Medicine. Faculty members in the Department provide not only didactic teaching but also direct patient care to the University’s student-athletes and the public. Because athletic training is a clinical science caring for relatively specific portion of the population that are physically active, the clinical education provided by these faculty members is an integral part of the student’s athletic training education. The Athletic Training Program prepares its students for board certification in the discipline, and the certification establishes the level of standards for athletic trainers. The Athletic Training Program is currently accredited by the Commission on Accreditation of Athletic Training Education (CAATE), and all board certification exam candidates must complete the accredited program in athletic training.

Accreditation process requires that each athletic training curriculum maintains a rigorous assessment process. Because the athletic training student who seeks board certification must complete an accredited program before being certified, we must comply with the standards and guidelines in order to stay accredited. University of North Dakota’s Athletic Training Program is accredited by CAATE until the summer of 2018. The external accrediting agency’s standards and guidelines require that each curriculum exercises extensive, explicit, rigorous, and continuous assessments of student progress, education program effectiveness and curriculum changes according to the assessment results. Since we must comply with all the accreditation requirements, the assessments implemented for accreditation is appropriate for adoption by the University assessment of the Athletic Training Program. The board of certification for the athletic training
profession (BOC, Inc.) is the standard for the vast majority of state licensure/certification/registration in athletic training all over the nation. The University assessment of the Athletic Training Program incorporated the standards of practice by BOC, Inc. into the assessment plan.

Definition of Certified Athletic Trainer

The Certified Athletic Trainer (AT) is an allied health care professional that is certified by the Board of Certification, Inc. (BOC). Certified Athletic Trainers are also sometimes referred to as sports therapists or sports medicine practitioners and are the centerpiece of the sports medicine team. They serve as a liaison to the athlete, coach, physician and other supplemental personnel providing care to athletes sustaining physical or emotional trauma. Specifically, the Certified Athletic Trainer's role delineation encompasses six domains:

- Athletic Injury Prevention and Risk Management
- Recognition, Evaluation and Assessment of Injuries and Illnesses
- Immediate Care of Injuries
- Treatment, Rehabilitation and Reconditioning
- Health Care Organization and Administration
- Professional Development and Responsibility

As a part of the complete sports medicine team, the Certified Athletic Trainer works under the direction of a licensed physician and in cooperation with other health care professionals, athletics administrators, coaches and parents.

**Student Learning Goals & Objectives:**

Student Learning Goal 1: The student learns that the athletic trainer renders service or treatment under the direction of a physician.

Student Learning Goal 2: The student understands and uses preventive measures to ensure the highest quality of care for every patient.

Student Learning Goal 3: The student provides standard immediate care procedures used in emergency situations, independent of setting.

Student Learning Goal 4: Prior to treatment, the student assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The student follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Student Learning Goal 5: In development of a treatment program, the student determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Student Learning Goal 6: The student learns that, with collaboration of the physician, the athletic trainer recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The student also
learns that the athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.

Student Learning Goal 7: The student understands that all services are documented in writing by the athletic trainer and are part of the patient’s permanent records. The student realizes that the athletic trainer accepts responsibility for recording details of the patient’s health status.

<table>
<thead>
<tr>
<th>Student Learning Goals &amp; Objectives</th>
<th>Possesses the knowledge, skills and dispositions to effectively care for physically active people in various settings while conducting: prevention, immediate care, diagnostic reasoning, medical decision making, treatment and rehabilitation strategies, discontinuation, organizational and administrative tasks.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Experiences</td>
<td>Course work, clinical experiences, clinical competency assessments, mini-presentations, case studies, self-assessment conducted every semester, web project, internship, and senior presentation.</td>
</tr>
<tr>
<td></td>
<td>Course work: is classroom and lab activities for the student to develop knowledge, skills and dispositions.</td>
</tr>
<tr>
<td></td>
<td>Clinical experiences: happens every semester along with didactic teaching. Each student is assigned to an intercollegiate athletic team or at a local high school while supervised by a preceptor throughout the season. The student gains skills and integrate coursework into clinical situations.</td>
</tr>
<tr>
<td></td>
<td>Clinical competency assessments: are performed by the student and evaluated by faculty to ensure that the student has mastered a certain level of competency in skills and knowledge on certain aspects of athletic training which were already covered in course work. Different competencies are covered at different levels of students, and easy skills and/or less complicated material are introduced earlier in the program.</td>
</tr>
<tr>
<td></td>
<td>Case studies: are required each of three years and are designed to progressively pique student interest and stimulate critical reasoning ability each year.</td>
</tr>
<tr>
<td></td>
<td>Student-Preceptor agreement: provides an opportunity for the student and the preceptor to preview the skills and knowledge to be acquired during the clinical experience then to review the same skills and knowledge periodically during their clinical experience together. Based on each student’s needs and the academic level, goals are set and evaluated between the preceptor and the student as the records of the goal-setting sessions are forwarded to the Department office for review.</td>
</tr>
<tr>
<td></td>
<td>EBM project: is a part of two practicum courses that enables the student to experience evidence-based approach through a research project over two semesters in junior year.</td>
</tr>
</tbody>
</table>
| **Internship**: provides the student to adapt to a different environment, to learn and grow in a new system, and to develop critical reasoning. **Senior presentation**: affords an opportunity for the student to integrate their understanding of a subject then to present in front of the fellow students and faculty. The faculty members provide guidance in preparation as well as feedback on the final performance. The process enables the faculty to assess the student’s ability to integrate information and seek evidence as well as gaining a comprehensive understanding of a subject within the professional discipline. As the culmination of the student’s level of cognitive integration, this process leading to the presentation serves as the capstone of the curriculum.  

| **Assessment Methods** Courses are sequences to provide the student with progressively more complex knowledge, skills, and disposition of various aspects of athletic training throughout the student’s time in the curriculum. Many of the courses have prerequisites to each other so that the student must successfully complete one course before enrolling in another. This approach ensures that the student has gained a certain level of competence before moving onto the next level of skill and knowledge acquisition. Disposition is assessed during clinical experiences under faculty members and during self-assessment each semester. Necessary data will be shared with Assessment Committee for interpretation and evaluation.  

Clinical experiences: feedback from faculty on the student’s clinical performance and needs are communicated to the Program Director who changes clinical assignments for the next semester reflecting each student’s needs.  

Clinical competency assessments: evaluation of competency by faculty member. For sophomores, 100% accuracy is required (due to relatively easy level of skills and knowledge). For juniors and seniors, 85% accuracy is required to pass each competency.  

Student-Preceptor Agreement: a unique agreement is drawn between a student and a preceptor (Department faculty) each time the student starts a new clinical experience and the agreement serves as a part of goal setting for the experience. For instance, a sophomore student may learn about importance of emergency action plan and how it’s executed while a junior may be asked to assess the ability to understand and operate an electrical therapeutic modality and a senior will answer about how well a head/neck injury can be assessed. Separately from the Student-Preceptor Agreement, there’s a list of competencies with which the student should be familiar at every stage in the program, and the preceptor can refer to this list to construct a meaningful agreement of learning for the student’s clinical experience. Record of the dialogs between
the student and the preceptor (plan for the clinical experience, feedback, review of the experience, etc.) will be kept on student file.

One-Minute Preceptor: a simple system to enhance clinical experience by facilitating meaningful encounters between the preceptor and the student. Faculty development sessions for preceptors provided the ways to interact with the students to improve the critical thinking process. The students were provided with short sessions on how to highlight the student’s critical thinking process to the preceptor. When One-Minute Preceptor is properly executed, the student receives timely and effective feedback on the current level of the critical thinking abilities through an event (i.e., case presentation/consultation) while the preceptor gains understanding of what the student needs to further explore the clinically savvy thinking process.

Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.

PxDx by E*Value: clinical experience is recorded by students via handheld computer or smartphone. The student’s experience at or immediately after the experience is recorded in handheld computer by the student. The results are synchronized with the server and results are available in simple statistical analyses every two weeks for the faculty. PxDx is not a tool to assess knowledge, skill, or disposition. It is a complementary tool to ensure that each student is experiencing what s/he needs. Because this system is in its initial year, only baseline data have been obtained. However, the baseline data will be useful in future years as the data will illuminate what should be considered substandard clinical involvement.

Outcome assessment by graduates: recent graduates will be surveyed to find out if they found what they learned in the Athletic Training Program to be useful in their current work setting. The plans are ongoing regarding on-line data collection and subsequent analysis.

**Timeline**

| Most items are collected every semester. PxDx clinical experience is updated every two weeks. Senior presentation feedback is collected once a year. Online assessment by graduates will be collected this summer and analyzed later in the summer. |

**Responsibilities**

| Each faculty member will collect data regarding course work and forward them to the Program Director. The Program Director presents the data to the Athletic Training Program Assessment Committee for analysis, |
interpretation and reporting of results. PxDx clinical experience reports will be compiled by the system administrator and forwarded to the Program Director. The Program Director presents the data to the Athletic Training Assessment Committee. The results of online assessment by graduates will be compiled by the project coordinator who will forward the results to the Assessment Committee. The Assessment Committee will interpret the results, develops recommendations, and reports to the Program Director and the faculty.

<table>
<thead>
<tr>
<th><strong>Use of Results And Process for Documentation &amp; Decision-Making</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on the data and committee recommendations, the Program Director and the faculty determines what changes should occur. Changes may occur on demand and at any time based on evidence, but program changes will be discussed and determined by all faculty in early summer for the next academic year’s implementation.</td>
</tr>
</tbody>
</table>
Status and Changes to the Assessment Plan Based on Recent Data Analysis (2014-15)

Educational Experiences:

- Course work: Ongoing.
  - Two courses (FMed 321 and FMed 211) that changed the format toward active learning are continuing to be offered in the new format employing the principles of active learning. The student feedback and review of the student performance have been positive, and the Assessment Committee is encouraged by the impact that active learning has on student learning. Instructors are encouraged to at least employ some methods of active learning in the courses in addition to FMed 321 and FMed 211. Instructors will be directed to additional assistance and training on campus regarding active learning.

- Course work: Upcoming changes toward active learning.
  - Based on the successes of FMed 321 and FMed 211 during 2013-2015 academic year, the program is expanding changes from traditional to active learning format for other courses in the program to facilitate students’ learning engagement and critical thinking. FMed 481 and FMed 205 will employ active learning methods throughout the semester in the upcoming academic year 2015-2016 (FMed 320/320L is being considered for a similar change).
    - FMed 481 (Athletic Injury Assessment, 4 credit hours) requires a great deal of academic information and critical thinking to apply the information to ascertain the nature of each injury. The change to the active learning format is aimed for the students to improve their problem solving skills and critical thinking ability.
    - FMed 205 (Anatomy for Athletic Trainers, 2 credit hours) is an applied anatomy course where the students learn needed palpation skills. They will learn to apply their knowledge of anatomy to find the structures over the patient’s skin by palpating. Active learning format should benefit the students transition their knowledge to palpation, which is a clinical skills essential to athletic training.
    - FMed 320 (Athletic Training Modalities, 2 credit hours) and FMed 320L (1 credit hour) present the theoretical and applied principles of the various apparatus used to facilitate the healing processes of the tissues after injury. A large volume of new information and ability to assimilate then apply the knowledge to the use of apparatus are required for this course. The process to convert the course toward active learning format is ongoing (FMed 320 and 320L are taught only during the spring semester).

- Clinical experiences: Ongoing.
  - Students provided positive feedback on preceptor effectiveness. Preceptors will receive continuing education in the form of faculty development on topics such as One-Minute Preceptor and Evidence-Based Medicine. The faculty also underwent on-campus training on mentorship to apply its principles to effectiveness on clinical education for the students.

- Clinical competency assessments: Ongoing.

- Case studies: Ongoing.
• Student-Preceptor Agreement: Ongoing.
• EBM project: Ongoing.
• Internship: Ongoing.
• Senior presentation: Ongoing.

Assessment:

• Clinical experiences: Continued feedback and improvement of every-day situations are made by the Program’s Clinical Coordinator.
• Clinical competency assessments: Ongoing. A thorough revision of the competency assessment process is being planned for the academic year 2015-2016 by the Assessment Committee.
• Student-Preceptor Agreement: Ongoing.
  ▪ Data across the students were collected and analyzed the past year to assess if changes and improvements need to be made. The Assessment Committee determined that the process improved the effectiveness over the predecessor (Self-Assessment).
• One-Minute Preceptor: Ongoing.
  ▪ Additional training in the form of faculty development was conducted, and on-campus mentorship training was conducted as it was aimed to apply toward effective preceptor instructions on the students. The feedback from the preceptors regarding this particular training was positive.
• Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.
• PxDx by E*Value: Ongoing.
  ▪ Data analyses were conducted. There’s still great variability in reported instances of the student clinical experiences. Clinical Coordinator will intervene early each semester to first determine if a particular clinical experience is meeting the student’s needs then facilitate more accurate recording.
Status and Changes to the Assessment Plan Based on Recent Data Analysis (2013)

Educational Experiences:

- Course work: Ongoing.
  - Two courses (FMed 321 and FMed 211) have changed instructional format from traditional lecture to asynchronous “out of class” knowledge dissemination then “in class” discussions/exercises to promote reasoning and knowledge synthesis.
  - Based on the Board of Certification exam scores (a part of data review for the Assessment), minor changes to improve instructions on clinical evaluation and immediate care have been implemented by the instructors of the respective courses.
- Clinical experiences: Ongoing.
  - Students provided positive feedback on preceptor effectiveness. Preceptors will receive continuing education in the form of faculty development on topics such as One-Minute Preceptor and Evidence-Based Medicine.
- Clinical competency assessments: Ongoing.
- Case studies: Ongoing.
- Self-assessment: Ongoing.
- EBM project: Instituted.
  - Students used Evidence-Based Medicine principles to solve a clinical problem then reported their findings in in-depth reports.
- Internship: Ongoing.
- Senior presentation: Ongoing.

Assessment:

- Clinical experiences: Continued feedback and improvement of every-day situations are made by the Program’s Clinical Coordinator.
- Clinical competency assessments: Ongoing.
- Self-assessment: Ongoing.
  - Data across the students were collected and analyzed the past year to assess if changes and improvements need to be made. The Assessment Committee determined that the process still benefits the students.
- One-Minute Preceptor: Ongoing.
  - Additional training in the form of faculty development was conducted.
- Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.
- PxDx by E*Value: Ongoing.
  - Data analyses were conducted. There’s still great variability in reported instances of the student clinical experiences. Clinical Coordinator will intervene early each
semester to first determine if a particular clinical experience is meeting the student’s needs then facilitate more accurate recording.

- Outcome assessment by graduates: Prototype survey constructed and administered a new version is being planned. An original survey was disseminated by the Alumni Relations Committee. Coordinator of Alumni Relations Committee and Assessment Committee will draft another online survey to the program alumni.
Assessment: Athletic Training Education Program – An Update (March 2013)

Review of Data

In early spring 2012, the Assessment Committee met, analyzed data and subsequently discussed the effectiveness of the assessment. Some of the data presented to the committee were deemed valuable to be shared with other faculty members to advance the level of instruction in the Division of Sports Medicine. In May 2012, the following sets of data were presented to the Division of Sports Medicine faculty to discuss the Assessment Committee’s findings and to facilitate discussion:

Academic Year 2011-2012 – Total number of clinical experience items as reported by students (by student average number)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute care</td>
<td>153</td>
<td>7.3</td>
</tr>
<tr>
<td>Administration</td>
<td>197</td>
<td>9.4</td>
</tr>
<tr>
<td>Assessment</td>
<td>1597</td>
<td>76.0</td>
</tr>
<tr>
<td>Exercise</td>
<td>1303</td>
<td>62.0</td>
</tr>
<tr>
<td>General medical</td>
<td>129</td>
<td>6.1</td>
</tr>
<tr>
<td>Modality</td>
<td>1755</td>
<td>83.6</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>132</td>
<td>6.3</td>
</tr>
<tr>
<td>Prevention</td>
<td>484</td>
<td>23.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5750</strong></td>
<td></td>
</tr>
</tbody>
</table>

Academic Year 2011-2012 – Types of clinical experience items as reported by students (directed is the highest level of involvement)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Total</th>
<th>Observed</th>
<th>Assisted</th>
<th>Directed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Little value</td>
<td>12</td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>84</td>
<td>10</td>
<td>19</td>
<td>55</td>
</tr>
<tr>
<td>3 - OK</td>
<td>359</td>
<td>60</td>
<td>91</td>
<td>208</td>
</tr>
<tr>
<td>4 - Good</td>
<td>1463</td>
<td>166</td>
<td>517</td>
<td>780</td>
</tr>
<tr>
<td>5 - Excellent</td>
<td>3830</td>
<td>440</td>
<td>989</td>
<td>2386</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5751</strong></td>
<td><strong>676</strong></td>
<td><strong>1622</strong></td>
<td><strong>3438</strong></td>
</tr>
</tbody>
</table>

Academic Year 2011-2012 – Clinical instructor rating and One-Minute Preceptor (OMP) encounters
Students and clinical instructors meet every semester and review the clinical performance and record the discussion in a semi-narrative format. The session is referred as “self-assessment,” and the process has been in place for over ten years. The committee reviewed every self-assessment record of the senior and junior students during 2011-2012 and found the following:

- Positive/Improved traits identified by the instructor (seniors):
  - Evaluation (3 instances)
  - Leadership (2 instances)
  - Professionalism

- Shortcomings identified by the instructor (seniors):
  - Confidence (2 instances)
  - Rehabilitation
  - Documentation

- Shortcomings identified by the instructor (juniors):
  - Evaluation (5 instances)
  - Rehabilitation (3 instances)
  - Confidence

Board of Certification (BOC) administers the certification exam upon completion of the UND Athletic Training Curriculum, and its results are used for state licensure applications. The committee reviewed the passing rates of the past two years and found the following:

- First time passing rate improved significantly.
- Prevention scored rose marginally.
- Evaluation and Diagnosis scores fell.
- Immediate Care scores declined slightly.
- Treatment, Rehabilitation and Record Keeping scores rose significantly.
- Organization and Administration scores improved slightly.
- Professional Responsibility scores rose.
- UND averages compared to all candidates:
  - Lower – Clinc. Eval./Diag., Immed. Care
- Changes in the BOC Certification Exam in the middle of the last two-year period make the comparison difficult.
Following the faculty discussion session with the provided data, the Assessment Committee considered the input to reflect on the assessment process.

**Committee Actions for Academic Year 2012-2013**

The Assessment Committee concluded at the end of academic year 2012 that the students are receiving adequate exposure to various clinical experiences, and they are given adequate opportunities to practice skills. The higher order learning, however, is more difficult to assess in every-day clinical encounters especially since every student must become a steward of own experience. Continuing One-Minute Preceptor initiative should provide the students more opportunities and meaningful encounters. Various sets of data indicate that the curriculum is laid out and functioning in an effective manner, and the faculty members are effectively providing academic and clinical education.

While the faculty members strive to provide better learning experience, their efforts cannot be effective without the student’s attitude toward active learning and exploration. Instead of simple in-service attendance, the students are now required to express what they learned via Blackboard. Preliminary review of the data indicated that the students are improving on what the key points of each session were. There’s a new message given to the students throughout the current academic year (2012-2013). The message is, “We want you to make a transition from being a student to being a professional WHILE you are in this program…you need to make a mindful effort every day to evolve from being a student to become a professional BEFORE graduation.”

**New Data (2013)**

The Assessment Committee gathered data a bit differently for 2012-2013. To examine the overall curriculum experience, the data were gathered to chronicle the senior students who are about to graduate (Class of 2013).
Total number of experiences by category reported by the Class of 2013 (after matriculation):

![Bar chart showing experiences by category for the Class of 2013.]

All student experiences by category (Class of 2013 only):

![Pie chart showing the distribution of all student experiences by category.]

Legend:
- Acute care
- Administration
- Assessment
- Exercise
- General medical condition
- Modality
Clinical instructor rating by students (Class of 2013 only):

Types of experiences by students (Class of 2013 only):
Tasks not yet reported by any students (Class of 2013):

<table>
<thead>
<tr>
<th>Task Category</th>
<th>Task</th>
<th>Covered in course</th>
<th>Covered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute care</td>
<td>Perform CPR</td>
<td>Yes</td>
<td>CPR training</td>
</tr>
<tr>
<td>Acute care</td>
<td>Poison control</td>
<td>Yes</td>
<td>First Aid training</td>
</tr>
<tr>
<td>Acute care</td>
<td>Use bag valve mask</td>
<td>Yes</td>
<td>CPR training</td>
</tr>
<tr>
<td>Administration</td>
<td>Develop plans</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
<tr>
<td>Administration</td>
<td>Facility design</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
<tr>
<td>Administration</td>
<td>Plan for catastrophic injury</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Instrument, glucose monitor</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Instrument, urine stix</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Nutrition, discorder intervention</td>
<td>Yes</td>
<td>Nutr 241</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Psychosocial, locate resources</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Psychosocial, substance abuse referral</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>Modality</td>
<td>Contrast bath</td>
<td>Yes</td>
<td>FMed 320</td>
</tr>
<tr>
<td>Modality</td>
<td>Paraffin</td>
<td>Yes</td>
<td>FMed 320</td>
</tr>
<tr>
<td>Modality</td>
<td>Whirlpool, cold</td>
<td>Yes</td>
<td>FMed 320</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, assess interaction</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, congestion</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, constipation</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, diarrhea</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, infection</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, nausea</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, runny nose</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Prevention</td>
<td>Mouthguard</td>
<td>Yes</td>
<td>FMed 213</td>
</tr>
<tr>
<td>Prevention</td>
<td>Severe weather guidelines</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
</tbody>
</table>

All of the above items not reported (23 out of 108) have been covered in courses or mandatory training such as CPR and first aid. Most of the items also have been experienced but not recorded. For instance, there’s cold whirlpool administered at the main site (Hyslop Sports Center) nearly every day but it is not recorded.

**Analysis of New Data (Longitudinal Data by BSAT Class of 2013)**

There’s a great deal of variability in the reporting of clinical experiences. Among Student A to Student G, some recorded a great number of tasks while a few seldom reported any. However, the patterns provide a profile of the overall experience. Assessment, Exercise (rehabilitation), and Modalities do indeed dominate the reported experiences, and they mirror what the students will encounter once they become certified athletic trainers.

Over 75% of the instructor encounters are rated Excellent or Good. Poor to Little Value encounters are just 6% of total encounters with the instructor.

The majority of student clinical experiences were performed by the students rather than observing the instructor or assisting the instructor. This indicates that the students are encouraged to “learn by doing” by the instructors.
While there are items not reported, they have either been experienced but never recorded or not experienced but taught sometime in the curriculum. All the items are covered in courses, and the curriculum is fulfilling its role in providing education.

Athletic training relies heavily on clinical education, and competence can be judged by clinical instructors. Data reported by students provide what they are experiencing for the most part, and they also indicate the high effectiveness of the clinical instructors. The academic curriculum provides the framework shaped by the accreditation body. The contents covered in courses undergo frequent reviews and the UND Athletic Training Program meets or exceeds standards. What the program strives for, however, is clinical competence which aims to prepare competent professionals rather than just students who gain knowledge and skills. The student-reported data provided valuable closing of the loop in the assessment process, and the analysis and implementation of the results will improve the curriculum delivery.
Introduction

The mission of the National Athletic Trainers' Association Board of Certification Inc. (BOC) is to certify athletic trainers and to identify for the public, quality healthcare professionals through a system of certification, adjudication, standards of practice and continuing competency programs. The BOC has been responsible for the certification of athletic trainers since 1969. Upon its inception, the BOC was a division of the professional membership organization the National Athletic Trainers' Association. However, in 1989, the BOC became an independent non-profit corporation.

Accordingly the BOC provides a certification program for the entry-level athletic trainer that confers the ATC® credential and establishes requirements for maintaining status as a certified athletic trainer, ATC® (to be known as “athletic trainer” from this point forward). A nine member Board of Directors governs the BOC. There are six Athletic Trainer Directors, one Physician Director, one Public Director and one Corporate/Educational Director.

The BOC is the only accredited certification program for athletic trainers in the United States. Every five years the BOC must undergo review and re-accreditation by the National Commission for Certifying agencies (NCCA). The NCCA is the accreditation body of the National Organization for Competency Assurance.

The BOC Standards of Professional Practice consists of two sections:

I. Practice Standards

II. Code of Professional Responsibility
The BOC Standards of Professional Practice

Practice Standards

Standard 1: Direction
The athletic trainer renders service or treatment under the direction of a physician.

Standard 2: Prevention
The athletic trainer understands and uses preventive measures to ensure the highest quality of care for every patient.

Standard 3: Immediate Care
The athletic trainer provides standard immediate care procedures used in emergency situations, independent of setting.

Standard 4: Clinical Evaluation and Diagnosis
Prior to treatment, the athletic trainer assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The athletic trainer follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Standard 5: Treatment, Rehabilitation and Reconditioning
In development of a treatment program, the athletic trainer determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Standard 6: Program Discontinuation
The athletic trainer, with collaboration of the physician, recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.

Standard 7: Organization & Administration
All services are documented in writing by the athletic trainer and are part of the patient’s permanent records. The athletic trainer accepts responsibility for recording details of the patient’s health status.
DEPARTMENTAL PLAN FOR ASSESSMENT OF STUDENT LEARNING
2013-2014 ACADEMIC YEAR

Department: Family Medicine

Program: Athletic Training (Bachelor of Science in Athletic Training)

Mission Statement: Division of Sports Medicine provides academic and clinical education for the Athletic Training Program culminating in Bachelor of Science in Athletic Training degree at University of North Dakota. The program develops athletic trainers who are effective communicators among patients and family members, healthcare professionals, and associated personnel. In addition to competence in athletic training knowledge, skills, and disposition, the Program strives to develop students’ medical decision making, life long learning, and effective problem solving abilities in sports medicine.

Background Information: University of North Dakota’s Athletic Training Program is administered by the University’s Division of Sports Medicine. Faculty members in the Division provide not only didactic teaching but also direct patient care to the University’s student-athletes and the public. Because athletic training is a clinical science caring for relatively specific portion of the population that are physically active, the clinical education provided by these faculty members is an integral part of the student’s athletic training education. The Athletic Training Program prepares its students for board certification in the discipline, and the certification establishes the level of standards for athletic trainers. The Athletic Training Program is currently accredited by the Commission on Accreditation of Athletic Training Education (CAATE), and all board certification exam candidates must complete the accredited program in athletic training.

Accreditation process requires that each athletic training curriculum maintains a rigorous assessment process. Because the athletic training student who seeks board certification must complete an accredited program before being certified, we must comply with the standards and guidelines in order to stay accredited. University of North Dakota’s Athletic Training Program is accredited by CAATE until the summer of 2018. The external accrediting agency’s standards and guidelines require that each curriculum exercises extensive, explicit, rigorous, and continuous assessments of student progress, education program effectiveness and curriculum changes according to the assessment results. Since we must comply with all the accreditation requirements, the assessments implemented for accreditation is appropriate for adoption by the University assessment of the Athletic Training Program. The board of certification for the athletic training profession (BOC, Inc.) is the standard for the vast majority of state licensure/certification/registration in athletic training all over the nation. The University
assessment of the Athletic Training Program incorporated the standards of practice by BOC, Inc. into the assessment plan.

Definition of Certified Athletic Trainer

The Certified Athletic Trainer (AT) is an allied health care professional that is certified by the Board of Certification, Inc. (BOC). Certified Athletic Trainers are also sometimes referred to as sports therapists or sports medicine practitioners and are the centerpiece of the sports medicine team. They serve as a liaison to the athlete, coach, physician and other supplemental personnel providing care to athletes sustaining physical or emotional trauma. Specifically, the Certified Athletic Trainer's role delineation encompasses six domains:

- Athletic Injury Prevention and Risk Management
- Recognition, Evaluation and Assessment of Injuries and Illnesses
- Immediate Care of Injuries
- Treatment, Rehabilitation and Reconditioning
- Health Care Organization and Administration
- Professional Development and Responsibility

As a part of the complete sports medicine team, the Certified Athletic Trainer works under the direction of a licensed physician and in cooperation with other health care professionals, athletics administrators, coaches and parents.

**Student Learning Goals & Objectives:**

**Student Learning Goal 1:** The student learns that the athletic trainer renders service or treatment under the direction of a physician.

**Student Learning Goal 2:** The student understands and uses preventive measures to ensure the highest quality of care for every patient.

**Student Learning Goal 3:** The student provides standard immediate care procedures used in emergency situations, independent of setting.

**Student Learning Goal 4:** Prior to treatment, the student assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The student follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

**Student Learning Goal 5:** In development of a treatment program, the student determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

**Student Learning Goal 6:** The student learns that, with collaboration of the physician, the athletic trainer recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The student also learns that the athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.
Student Learning Goal 7: The student understands that all services are documented in writing by the athletic trainer and are part of the patient’s permanent records. The student realizes that the athletic trainer accepts responsibility for recording details of the patient’s health status.

<table>
<thead>
<tr>
<th><strong>Student Learning Goals &amp; Objectives</strong></th>
<th>Possesses the knowledge, skills and dispositions to effectively care for physically active people in various settings while conducting: prevention, immediate care, diagnostic reasoning, medical decision making, treatment and rehabilitation strategies, discontinuation, organizational and administrative tasks.</th>
</tr>
</thead>
</table>
| **Educational Experiences**            | Course work, clinical experiences, clinical competency assessments, mini-presentations, case studies, self-assessment conducted every semester, web project, internship, and senior presentation.  
Course work: is classroom and lab activities for the student to develop knowledge, skills and dispositions.  
Clinical experiences: happens every semester along with didactic teaching. Each student is assigned to an intercollegiate athletic team or at a local high school while supervised by a preceptor throughout the season. The student gains skills and integrate coursework into clinical situations.  
Clinical competency assessments: are performed by the student and evaluated by faculty to ensure that the student has mastered a certain level of competency in skills and knowledge on certain aspects of athletic training which were already covered in course work. Different competencies are covered at different levels of students, and easy skills and/or less complicated material are introduced earlier in the program.  
Case studies: are required each of three years and are designed to progressively pique student interest and stimulate critical reasoning ability each year.  
Self-assessment: enables the student to evaluate the level of competence and familiarity in athletic training skills and knowledge appropriate for the level of the student. The self-assessment is shared with the clinical instructor every semester to minimize gaps in perception of competency and to stimulate discussion to improve the student’s clinical experience in the coming semesters.  
EBM project: is a part of two practicum courses that enables the student to experience evidence-based approach through a research project over two semesters in junior year.  
Internship: provides the student to adapt to a different environment, to learn and grow in a new system, and to develop critical reasoning.  
Senior presentation: affords an opportunity for the student to integrate their understanding of a subject then to present in front of the fellow students and faculty. The faculty members provide guidance in preparation as well as feedback on the final performance. The process enables the faculty to assess the student’s ability to |
integrate information and seek evidence as well as gaining a comprehensive understanding of a subject within the professional discipline. As the culmination of the student’s level of cognitive integration, this process leading to the presentation serves as the capstone of the curriculum.

| Assessment Methods | Courses are sequences to provide the student with progressively more complex knowledge, skills, and disposition of various aspects of athletic training throughout the student’s time in the curriculum. Many of the courses have prerequisites to each other so that the student must successfully complete one course before enrolling in another. This approach ensures that the student has gained a certain level of competence before moving onto the next level of skill and knowledge acquisition. Disposition is assessed during clinical experiences under faculty members and during self-assessment each semester. Necessary data will be shared with Assessment Committee for interpretation and evaluation.

Clinical experiences: feedback from faculty on the student’s clinical performance and needs are communicated to the Program Director who changes clinical assignments for the next semester reflecting each student’s needs.

Clinical competency assessments: evaluation of competency by faculty member. For sophomores, 100% accuracy is required (due to relatively easy level of skills and knowledge). For juniors and seniors, 85% accuracy is required to pass each competency.

Self-assessment: each item deemed appropriate for the level of the student will be used. For instance, a sophomore student may learn about importance of sphygmomanometer and its use while a junior will be asked to assess the ability to understand and operate an electrical therapeutic modality and a senior will answer about how well a head/neck injury can be assessed. Student assesses the level of competency in each item considered essential for the level. Student narrative and faculty feedback will be kept on student file.

One-Minute Preceptor: a simple system to enhance clinical experience by facilitating meaningful encounters between the preceptor and the student. Faculty development sessions for preceptors provided the ways to interact with the students to improve the critical thinking process. The students were provided with short sessions on how to highlight the student’s critical thinking process to the preceptor. When One-Minute Preceptor is properly executed, the student receives timely and effective feedback on the current level of the critical thinking abilities through an event (i.e., case presentation/consultation) while the preceptor gains understanding of what the student needs to further explore the clinically savvy thinking process.

Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form
Feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.

PxDx by E*Value: clinical experience is recorded by students via handheld computer or smartphone. The student’s experience at or immediately after the experience is recorded in handheld computer by the student. The results are synchronized with the server and results are available in simple statistical analyses every two weeks for the faculty. PxDx is not a tool to assess knowledge, skill, or disposition. It is a complementary tool to ensure that each student is experiencing what s/he needs. Because this system is in its initial year, only baseline data have been obtained. However, the baseline data will be useful in future years as the data will illuminate what should be considered substandard clinical involvement.

Outcome assessment by graduates: recent graduates will be surveyed to find out if they found what they learned in the Athletic Training Program to be useful in their current work setting. The plans are ongoing regarding on-line data collection and subsequent analysis.

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Most items are collected every semester. PxDx clinical experience is updated every two weeks. Senior presentation feedback is collected once a year. Online assessment by graduates will be collected this summer and analyzed later in the summer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities</td>
<td>Each faculty member will collect data regarding course work and forward them to the Program Director. The Program Director presents the data to the Athletic Training Program Assessment Committee for analysis, interpretation and reporting of results. PxDx clinical experience reports will be compiled by the system administrator and forwarded to the Program Director. The Program Director presents the data to the Athletic Training Assessment Committee. The results of online assessment by graduates will be compiled by the project coordinator who will forward the results to the Assessment Committee. The Assessment Committee will interpret the results, develops recommendations, and reports to the Program Director and the faculty.</td>
</tr>
<tr>
<td>Use of Results And Process for Documentation &amp; Decision-Making</td>
<td>Based on the data and committee recommendations, the Program Director and the faculty determines what changes should occur. Changes may occur on demand and at any time based on evidence, but program changes will be discussed and determined by all faculty in early summer for the next academic year’s implementation.</td>
</tr>
</tbody>
</table>
Status and Changes to the Assessment Plan Based on Recent Data Analysis (2013)

Educational Experiences:

- Course work: Ongoing.
  - Two courses (FMed 321 and FMed 211) have changed instructional format from traditional lecture to asynchronous “out of class” knowledge dissemination then “in class” discussions/exercises to promote reasoning and knowledge synthesis.
  - Based on the Board of Certification exam scores (a part of data review for the Assessment), minor changes to improve instructions on clinical evaluation and immediate care have been implemented by the instructors of the respective courses.
- Clinical experiences: Ongoing.
  - Students provided positive feedback on preceptor effectiveness. Preceptors will receive continuing education in the form of faculty development on topics such as One-Minute Preceptor and Evidence-Based Medicine.
- Clinical competency assessments: Ongoing.
- Case studies: Ongoing.
- Self-assessment: Ongoing.
- EBM project: Instituted.
  - Students used Evidence-Based Medicine principles to solve a clinical problem then reported their findings in in-depth reports.
- Internship: Ongoing.
- Senior presentation: Ongoing.

Assessment:

- Clinical experiences: Continued feedback and improvement of every-day situations are made by the Program’s Clinical Coordinator.
- Clinical competency assessments: Ongoing.
- Self-assessment: Ongoing.
  - Data across the students were collected and analyzed the past year to assess if changes and improvements need to be made. The Assessment Committee determined that the process still benefits the students.
- One-Minute Preceptor: Ongoing.
  - Additional training in the form of faculty development was conducted.
- Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.
- PxDx by E*Value: Ongoing.
  - Data analyses were conducted. There’s still great variability in reported instances of the student clinical experiences. Clinical Coordinator will intervene early each
semester to first determine if a particular clinical experience is meeting the student’s needs then facilitate more accurate recording.

- Outcome assessment by graduates: Prototype survey constructed and administered a new version is being planned. An original survey was disseminated by the Alumni Relations Committee. Coordinator of Alumni Relations Committee and Assessment Committee will draft another online survey to the program alumni.
Assessment: Athletic Training Education Program – An Update (March 2013)

Review of Data

In early spring 2012, the Assessment Committee met, analyzed data and subsequently discussed the effectiveness of the assessment. Some of the data presented to the committee were deemed valuable to be shared with other faculty members to advance the level of instruction in the Division of Sports Medicine. In May 2012, the following sets of data were presented to the Division of Sports Medicine faculty to discuss the Assessment Committee’s findings and to facilitate discussion:

Academic Year 2011-2012 – Total number of clinical experience items as reported by students (by student average number)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute care</td>
<td>153</td>
<td>7.3</td>
</tr>
<tr>
<td>Administration</td>
<td>197</td>
<td>9.4</td>
</tr>
<tr>
<td>Assessment</td>
<td>1597</td>
<td>76.0</td>
</tr>
<tr>
<td>Exercise</td>
<td>1303</td>
<td>62.0</td>
</tr>
<tr>
<td>General medical</td>
<td>129</td>
<td>6.1</td>
</tr>
<tr>
<td>Modality</td>
<td>1755</td>
<td>83.6</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>132</td>
<td>6.3</td>
</tr>
<tr>
<td>Prevention</td>
<td>484</td>
<td>23.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5750</strong></td>
<td></td>
</tr>
</tbody>
</table>

Academic Year 2011-2012 – Types of clinical experience items as reported by students (directed is the highest level of involvement)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Total</th>
<th>Observed</th>
<th>Assisted</th>
<th>Directed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Little value</td>
<td>12</td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>84</td>
<td>10</td>
<td>19</td>
<td>55</td>
</tr>
<tr>
<td>3 - OK</td>
<td>359</td>
<td>60</td>
<td>91</td>
<td>208</td>
</tr>
<tr>
<td>4 - Good</td>
<td>1463</td>
<td>166</td>
<td>517</td>
<td>780</td>
</tr>
<tr>
<td>5 - Excellent</td>
<td>3830</td>
<td>440</td>
<td>989</td>
<td>2386</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5751</strong></td>
<td><strong>676</strong></td>
<td><strong>1622</strong></td>
<td><strong>3438</strong></td>
</tr>
</tbody>
</table>

Academic Year 2011-2012 – Clinical instructor rating and One-Minute Preceptor (OMP) encounters
<table>
<thead>
<tr>
<th>Experience</th>
<th>Total</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Little value</td>
<td>12</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>84</td>
<td>79</td>
<td>5</td>
</tr>
<tr>
<td>3 - OK</td>
<td>359</td>
<td>341</td>
<td>13</td>
</tr>
<tr>
<td>4 - Good</td>
<td>1463</td>
<td>1025</td>
<td>189</td>
</tr>
<tr>
<td>5 - Excellent</td>
<td>3830</td>
<td>2553</td>
<td>775</td>
</tr>
<tr>
<td>Total</td>
<td>5751</td>
<td>4009</td>
<td>982</td>
</tr>
</tbody>
</table>

Students and clinical instructors meet every semester and review the clinical performance and record the discussion in a semi-narrative format. The session is referred as “self-assessment,” and the process has been in place for over ten years. The committee reviewed every self-assessment record of the senior and junior students during 2011-2012 and found the following:

- **Positive/Improved traits identified by the instructor (seniors):**
  - Evaluation (3 instances)
  - Leadership (2 instances)
  - Professionalism
- **Shortcomings identified by the instructor (seniors):**
  - Confidence (2 instances)
  - Rehabilitation
  - Documentation
- **Shortcomings identified by the instructor (juniors):**
  - Evaluation (5 instances)
  - Rehabilitation (3 instances)
  - Confidence

Board of Certification (BOC) administers the certification exam upon completion of the UND Athletic Training Curriculum, and its results are used for state licensure applications. The committee reviewed the passing rates of the past two years and found the following:

- First time passing rate improved significantly.
- Prevention scored rose marginally.
- Evaluation and Diagnosis scores fell.
- Immediate Care scores declined slightly.
- Treatment, Rehabilitation and Record Keeping scores rose significantly.
- Organization and Administration scores improved slightly.
- Professional Responsibility scores rose.
- UND averages compared to all candidates:
  - Lower – Clinc. Eval./Diag., Immed. Care
- Changes in the BOC Certification Exam in the middle of the last two-year period make the comparison difficult.
Following the faculty discussion session with the provided data, the Assessment Committee considered the input to reflect on the assessment process.

Committee Actions for Academic Year 2012-2013

The Assessment Committee concluded at the end of academic year 2012 that the students are receiving adequate exposure to various clinical experiences, and they are given adequate opportunities to practice skills. The higher order learning, however, is more difficult to assess in every-day clinical encounters especially since every student must become a steward of own experience. Continuing One-Minute Preceptor initiative should provide the students more opportunities and meaningful encounters. Various sets of data indicate that the curriculum is laid out and functioning in an effective manner, and the faculty members are effectively providing academic and clinical education.

While the faculty members strive to provide better learning experience, their efforts cannot be effective without the student’s attitude toward active learning and exploration. Instead of simple in-service attendance, the students are now required to express what they learned via Blackboard. Preliminary review of the data indicated that the students are improving on what the key points of each session were. There’s a new message given to the students throughout the current academic year (2012-2013). The message is, “We want you to make a transition from being a student to being a professional WHILE you are in this program...you need to make a mindful effort every day to evolve from being a student to become a professional BEFORE graduation.”

New Data (2013)

The Assessment Committee gathered data a bit differently for 2012-2013. To examine the overall curriculum experience, the data were gathered to chronicle the senior students who are about to graduate (Class of 2013).
Total number of experiences by category reported by the Class of 2013 (after matriculation):

![Bar chart showing experiences by category for the Class of 2013.]

All student experiences by category (Class of 2013 only):

![Pie chart showing the distribution of experiences by category.]

- Acute care
- Administration
- Assessment
- Exercise
- General medical condition
- Modality
Clinical instructor rating by students (Class of 2013 only):

Types of experiences by students (Class of 2013 only):
Tasks not yet reported by any students (Class of 2013):

<table>
<thead>
<tr>
<th>Task Category</th>
<th>Task</th>
<th>Covered in course</th>
<th>Covered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute care</td>
<td>Perform CPR</td>
<td>Yes</td>
<td>CPR training</td>
</tr>
<tr>
<td>Acute care</td>
<td>Poison control</td>
<td>Yes</td>
<td>First Aid training</td>
</tr>
<tr>
<td>Acute care</td>
<td>Use bag valve mask</td>
<td>Yes</td>
<td>CPR training</td>
</tr>
<tr>
<td>Administration</td>
<td>Develop plans</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
<tr>
<td>Administration</td>
<td>Facility design</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
<tr>
<td>Administration</td>
<td>Plan for catastrophic injury</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Instrument, glucose monitor</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Instrument, urine stix</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Nutrition, disorder intervention</td>
<td>Yes</td>
<td>Nutr 241</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Psychosocial, locate resources</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>General medical condition</td>
<td>Psychosocial, substance abuse referral</td>
<td>Yes</td>
<td>FMed 200</td>
</tr>
<tr>
<td>Modality</td>
<td>Contrast bath</td>
<td>Yes</td>
<td>FMed 320</td>
</tr>
<tr>
<td>Modality</td>
<td>Parafin</td>
<td>Yes</td>
<td>FMed 320</td>
</tr>
<tr>
<td>Modality</td>
<td>Whirlpool, cold</td>
<td>Yes</td>
<td>FMed 320</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, assess interaction</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, congestion</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, constipation</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, diarrhea</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, infection</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, nausea</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>OTC, runny nose</td>
<td>Yes</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Prevention</td>
<td>Mouthguard</td>
<td>Yes</td>
<td>FMed 213</td>
</tr>
<tr>
<td>Prevention</td>
<td>Severe weather guidelines</td>
<td>Yes</td>
<td>FMed 343</td>
</tr>
</tbody>
</table>

All of the above items not reported (23 out of 108) have been covered in courses or mandatory training such as CPR and first aid. Most of the items also have been experienced but not recorded. For instance, there’s cold whirlpool administered at the main site (Hyslop Sports Center) nearly every day but it is not recorded.

Analysis of New Data (Longitudinal Data by BSAT Class of 2013)

There’s a great deal of variability in the reporting of clinical experiences. Among Student A to Student G, some recorded a great number of tasks while a few seldom reported any. However, the patterns provide a profile of the overall experience. Assessment, Exercise (rehabilitation), and Modalities do indeed dominate the reported experiences, and they mirror what the students will encounter once they become certified athletic trainers.

Over 75% of the instructor encounters are rated Excellent or Good. Poor to Little Value encounters are just 6% of total encounters with the instructor.

The majority of student clinical experiences were performed by the students rather than observing the instructor or assisting the instructor. This indicates that the students are encouraged to “learn by doing” by the instructors.
While there are items not reported, they have either been experienced but never recorded or not experienced but taught sometime in the curriculum. All the items are covered in courses, and the curriculum is fulfilling its role in providing education.

Athletic training relies heavily on clinical education, and competence can be judged by clinical instructors. Data reported by students provide what they are experiencing for the most part, and they also indicate the high effectiveness of the clinical instructors. The academic curriculum provides the framework shaped by the accreditation body. The contents covered in courses undergo frequent reviews and the UND Athletic Training Program meets or exceeds standards. What the program strives for, however, is clinical competence which aims to prepare competent professionals rather than just students who gain knowledge and skills. The student-reported data provided valuable closing of the loop in the assessment process, and the analysis and implementation of the results will improve the curriculum delivery.
Introduction

The mission of the National Athletic Trainers' Association Board of Certification Inc. (BOC) is to certify athletic trainers and to identify for the public, quality healthcare professionals through a system of certification, adjudication, standards of practice and continuing competency programs. The BOC has been responsible for the certification of athletic trainers since 1969. Upon its inception, the BOC was a division of the professional membership organization the National Athletic Trainers' Association. However, in 1989, the BOC became an independent non-profit corporation.

Accordingly the BOC provides a certification program for the entry-level athletic trainer that confers the ATC® credential and establishes requirements for maintaining status as a certified athletic trainer, ATC® (to be known as “athletic trainer” from this point forward). A nine member Board of Directors governs the BOC. There are six Athletic Trainer Directors, one Physician Director, one Public Director and one Corporate/Educational Director.

The BOC is the only accredited certification program for athletic trainers in the United States. Every five years the BOC must undergo review and re-accreditation by the National Commission for Certifying agencies (NCCA). The NCCA is the accreditation body of the National Organization for Competency Assurance.

The BOC Standards of Professional Practice consists of two sections:

I. Practice Standards

II. Code of Professional Responsibility
The BOC Standards of Professional Practice

Practice Standards

Standard 1: Direction
The athletic trainer renders service or treatment under the direction of a physician.

Standard 2: Prevention
The athletic trainer understands and uses preventive measures to ensure the highest quality of care for every patient.

Standard 3: Immediate Care
The athletic trainer provides standard immediate care procedures used in emergency situations, independent of setting.

Standard 4: Clinical Evaluation and Diagnosis
Prior to treatment, the athletic trainer assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The athletic trainer follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Standard 5: Treatment, Rehabilitation and Reconditioning
In development of a treatment program, the athletic trainer determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Standard 6: Program Discontinuation
The athletic trainer, with collaboration of the physician, recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.

Standard 7: Organization & Administration
All services are documented in writing by the athletic trainer and are part of the patient’s permanent records. The athletic trainer accepts responsibility for recording details of the patient’s health status.
Departmental Plan for Assessment of Student Learning
2010-2011 Academic Year

Department: Family Medicine

Program: Athletic Training (Bachelor of Science in Athletic Training)

Mission Statement: Division of Sports Medicine provides academic and clinical education for the Athletic Training Program culminating in Bachelor of Science in Athletic Training degree at University of North Dakota. The program develops athletic trainers who are effective communicators among patients and family members, healthcare professionals, and associated personnel. In addition to competence in athletic training knowledge, skills, and disposition, the Program strives to develop students’ medical decision making, life long learning, and effective problem solving abilities in sports medicine.

Background Information: University of North Dakota’s Athletic Training Program is administered by the University’s Division of Sports Medicine. Faculty members in the Division provide not only didactic teaching but also direct patient care to the University’s student-athletes and the public. Because athletic training is a clinical science caring for relatively specific portion of the population that are physically active, the clinical education provided by these faculty members is an integral part of the student’s athletic training education. The Athletic Training Program prepares its students for board certification in the discipline, and the certification establishes the level of standards for athletic trainers. The Athletic Training Program is currently accredited by the Commission on Accreditation of Athletic Training Education (CAATE), and all board certification exam candidates must complete the accredited program in athletic training.

Accreditation process requires that each athletic training curriculum maintains a rigorous assessment process. Because the athletic training student who seeks board certification must complete an accredited program before being certified, we must comply with the standards and guidelines in order to stay accredited. University of North Dakota’s Athletic Training Program is accredited by CAATE until the summer of 2018. The external accrediting agency’s standards and guidelines require that each curriculum exercises extensive, explicit, rigorous, and continuous assessments of student progress, education program effectiveness and curriculum changes according to the assessment results. Since we must comply with all the accreditation requirements, the assessments implemented for accreditation is appropriate for adoption by the University assessment of the Athletic Training Program. The board of certification for the athletic training profession (BOC, Inc.) is the standard for the vast majority of state licensure/certification/registration in athletic training all over the nation. The University
assessments of the Athletic Training Program incorporated the standards of practice by BOC, Inc. into the assessment plan.

Definition of Certified Athletic Trainer

The Certified Athletic Trainer (AT) is an allied health care professional that is certified by the Board of Certification, Inc. (BOC). Certified Athletic Trainers are also sometimes referred to as sports therapists or sports medicine practitioners and are the centerpiece of the sports medicine team. They serve as a liaison to the athlete, coach, physician and other supplemental personnel providing care to athletes sustaining physical or emotional trauma. Specifically, the Certified Athletic Trainer's role delineation encompasses six domains:

- Athletic Injury Prevention and Risk Management
- Recognition, Evaluation and Assessment of Injuries and Illnesses
- Immediate Care of Injuries
- Treatment, Rehabilitation and Reconditioning
- Health Care Organization and Administration
- Professional Development and Responsibility

As a part of the complete sports medicine team, the Certified Athletic Trainer works under the direction of a licensed physician and in cooperation with other health care professionals, athletics administrators, coaches and parents.

Student Learning Goals & Objectives:

Student Learning Goal 1: The student learns that the athletic trainer renders service or treatment under the direction of a physician.

Student Learning Goal 2: The student understands and uses preventive measures to ensure the highest quality of care for every patient.

Student Learning Goal 3: The student provides standard immediate care procedures used in emergency situations, independent of setting.

Student Learning Goal 4: Prior to treatment, the student assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The student follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Student Learning Goal 5: In development of a treatment program, the student determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Student Learning Goal 6: The student learns that, with collaboration of the physician, the athletic trainer recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The student also learns that the athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.
Student Learning Goal 7: The student understands that all services are documented in writing by
the athletic trainer and are part of the patient’s permanent records. The
student realizes that the athletic trainer accepts responsibility for
recording details of the patient’s health status.

<table>
<thead>
<tr>
<th>Student Learning Goals &amp; Objectives</th>
<th>Possesses the knowledge, skills and dispositions to effectively care for physically active people in various settings while conducting: prevention, immediate care, diagnostic reasoning, medical decision making, treatment and rehabilitation strategies, discontinuation, organizational and administrative tasks.</th>
</tr>
</thead>
</table>
| Educational Experiences            | Course work, clinical experiences, clinical competency assessments, mini-presentations, case studies, self-assessment conducted every semester, web project, internship, and senior presentation.  
Course work: is classroom and lab activities for the student to develop knowledge, skills and dispositions.  
Clinical experiences: happens every semester along with didactic teaching.  
Each student is assigned to an intercollegiate athletic team while supervised by a faculty member throughout the season. The student gains skills and integrate coursework into clinical situations.  
Clinical competency assessments: are performed by the student and evaluated by faculty to ensure that the student has mastered a certain level of competency in skills and knowledge on certain aspects of athletic training which were already covered in course work. Different competencies are covered at different levels of students, and easy skills and/or less complicated material are introduced earlier in the program.  
Case studies: are required each of three years and are designed to progressively pique student interest and stimulate critical reasoning ability each year.  
Self-assessment: enables the student to evaluate the level of competence and familiarity in athletic training skills and knowledge appropriate for the level of the student. The self-assessment is shared with the clinical instructor every semester to minimize gaps in perception of competency and to stimulate discussion to improve the student’s clinical experience in the coming semesters.  
Web project: is a part of a course that enables the student to integrate all components of athletic training into one written document based on an injury from its beginning (prevention and immediate care) to the end (discharge).  
Internship: provides the student to adapt to a different environment, to learn and grow in a new system, and to develop critical reasoning.  
Senior presentation: affords an opportunity for the student to integrate their understanding of a subject then to present in front of the fellow students and faculty. The faculty members provide guidance in preparation as well as feedback on the final performance. |
<table>
<thead>
<tr>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses are sequences to provide the student with progressively more complex knowledge, skills, and disposition of various aspects of athletic training throughout the student’s time in the curriculum. Many of the courses have prerequisites to each other so that the student must successfully complete one course before enrolling in another. This approach ensures that the student has gained a certain level of competence before moving onto the next level of skill and knowledge acquisition. Disposition is assessed during clinical experiences under faculty members and during self-assessment each semester. Necessary data will be shared with Assessment Committee for interpretation and evaluation.</td>
</tr>
<tr>
<td>Clinical experiences: feedback from faculty on the student’s clinical performance and needs are communicated to the Program Director who changes clinical assignments for the next semester reflecting each student’s needs.</td>
</tr>
<tr>
<td>Clinical competency assessments: evaluation of competency by faculty member. For sophomores, 100% accuracy is required (due to relatively easy level of skills and knowledge). For juniors and seniors, 85% accuracy is required to pass each competency.</td>
</tr>
<tr>
<td>Self-assessment: each item deemed appropriate for the level of the student will be used. For instance, a sophomore student may learn about importance of sphygmomanometer and its use while a junior will be asked to assess the ability to understand and operate an electrical therapeutic modality and a senior will answer about how well a head/neck injury can be assessed. Student assesses the level of competency in each item considered essential for the level. Student narrative and faculty feedback will be kept on student file.</td>
</tr>
<tr>
<td>Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.</td>
</tr>
<tr>
<td>ATEx: Athletic Training Clinical Experience recorded by students via handheld computer. The student’s experience at or immediately after the experience is recorded in handheld computer by the student. The results are synchronized with the server and results are available in simple statistical analyses every two weeks for the faculty. ATEx is not a tool to assess knowledge, skill, or disposition. It is a complementary tool to ensure that each student is experiencing what s/he needs. Because this system is in its initial year, only baseline data have been obtained. However, the baseline data will be useful in future years as the data will illuminate what should be considered substandard clinical involvement.</td>
</tr>
<tr>
<td>Outcome assessment by graduates: recent graduates will be surveyed to find out if they found what they learned in the Athletic Training</td>
</tr>
</tbody>
</table>
Program to be useful in their current work setting. The plans are ongoing regarding on-line data collection and subsequent analysis.

<table>
<thead>
<tr>
<th><strong>Timeline</strong></th>
<th>Most items are collected every semester. ATEx clinical experience is updated every two weeks. Senior presentation feedback is collected once a year. Online assessment by graduates will be collected this summer and analyzed later in the summer.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responsibilities</strong></td>
<td>Each faculty member will collect data regarding course work and forward them to the Program Director. The Program Director presents the data to the Athletic Training Program Assessment Committee for analysis, interpretation and reporting of results. ATEx clinical experience reports will be compiled by the ATEx administrator and forwarded to the Program Director. The Program Director presents the data to the Athletic Training Assessment Committee. The results of online assessment by graduates will be compiled by the project coordinator who will forward the results to the Assessment Committee. The Assessment Committee will interpret the results, develops recommendations, and reports to the Program Director and the faculty.</td>
</tr>
<tr>
<td><strong>Use of Results And Process for Documentation &amp; Decision-Making</strong></td>
<td>Based on the data and committee recommendations, the Program Director and the faculty determines what changes should occur. Changes may occur on demand and at any time based on evidence, but program changes will be discussed and determined by all faculty in early summer for the next academic year’s implementation.</td>
</tr>
</tbody>
</table>
BOC Standards of Professional Practice
Implemented January 1, 2006

Introduction

The mission of the National Athletic Trainers' Association Board of Certification Inc. (BOC) is to certify athletic trainers and to identify for the public, quality healthcare professionals through a system of certification, adjudication, standards of practice and continuing competency programs. The BOC has been responsible for the certification of athletic trainers since 1969. Upon its inception, the BOC was a division of the professional membership organization the National Athletic Trainers' Association. However, in 1989, the BOC became an independent non-profit corporation.

Accordingly the BOC provides a certification program for the entry-level athletic trainer that confers the ATC® credential and establishes requirements for maintaining status as a certified athletic trainer, ATC® (to be known as “athletic trainer” from this point forward). A nine member Board of Directors governs the BOC. There are six Athletic Trainer Directors, one Physician Director, one Public Director and one Corporate/Educational Director.

The BOC is the only accredited certification program for athletic trainers in the United States. Every five years the BOC must undergo review and re-accreditation by the National Commission for Certifying agencies (NCCA). The NCCA is the accreditation body of the National Organization for Competency Assurance.

The BOC Standards of Professional Practice consists of two sections:

I. Practice Standards

II. Code of Professional Responsibility
The BOC Standards of Professional Practice

Practice Standards

Standard 1: Direction
The athletic trainer renders service or treatment under the direction of a physician.

Standard 2: Prevention
The athletic trainer understands and uses preventive measures to ensure the highest quality of care for every patient.

Standard 3: Immediate Care
The athletic trainer provides standard immediate care procedures used in emergency situations, independent of setting.

Standard 4: Clinical Evaluation and Diagnosis
Prior to treatment, the athletic trainer assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The athletic trainer follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Standard 5: Treatment, Rehabilitation and Reconditioning
In development of a treatment program, the athletic trainer determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Standard 6: Program Discontinuation
The athletic trainer, with collaboration of the physician, recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.

Standard 7: Organization & Administration
All services are documented in writing by the athletic trainer and are part of the patient’s permanent records. The athletic trainer accepts responsibility for recording details of the patient’s health status.
DEPARTMENTAL PLAN FOR ASSESSMENT OF STUDENT LEARNING
2006-2007 ACADEMIC YEAR

Department: Family Medicine

Program: Athletic Training (Bachelor of Science in Athletic Training)

Mission Statement: Division of Sports Medicine provides academic and clinical education for the Athletic Training Program culminating in Bachelor of Science in Athletic Training degree at University of North Dakota. The program develops athletic trainers who are effective communicators among patients and family members, healthcare professionals, and associated personnel. In addition to competence in athletic training knowledge, skills, and disposition, the Program strives to develop students’ medical decision making, life long learning, and effective problem solving abilities in sports medicine.

Background Information: University of North Dakota’s Athletic Training Program is administered by the University’s Division of Sports Medicine. Faculty members in the Division provide not only didactic teaching but also direct patient care to the University’s student-athletes and the public. Because athletic training is a clinical science caring for relatively specific portion of the population that are physically active, the clinical education provided by these faculty members is an integral part of the student’s athletic training education. The Athletic Training Program prepares its students for board certification in the discipline, and the certification establishes the level of standards for athletic trainers. The Athletic Training Program is currently accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), and all board certification exam candidates must complete the accredited program in athletic training.

Accreditation process requires that each athletic training curriculum maintains a rigorous assessment process. Currently, the accreditation body for athletic training curriculum is in transition from CAAHEP to Commission on Accreditation of Athletic Training Education (CAATE). During this transition, standards and guidelines for athletic training education programs undergo changes and our Athletic Training Program will go through the accreditation review in the process. Because the athletic training student who seeks board certification must complete an accredited program before being certified, we must comply with the changing standards and guidelines in order to stay accredited. The external accrediting agency’s standards and guidelines require that each curriculum exercises extensive, explicit, rigorous, and continuous assessments of student progress, education program effectiveness and curriculum changes according to the assessment results. Since we must comply with all the accreditation requirements, the assessments
implemented for accreditation is appropriate for the University assessment of the Athletic Training Program. Therefore, our Assessment Goals and Objectives are being revised because the accreditation body is undergoing changes.

Definition of Certified Athletic Trainer

The Certified Athletic Trainer (AT) is an allied health care professional that is certified by the Board of Certification, Inc. (BOC). Certified Athletic Trainers are also sometimes referred to as sports therapists or sports medicine practitioners and are the centerpiece of the sports medicine team. They serve as a liaison to the athlete, coach, physician and other supplemental personnel providing care to athletes sustaining physical or emotional trauma. Specifically, the Certified Athletic Trainer's role delineation encompasses six domains:

- Athletic Injury Prevention and Risk Management
- Recognition, Evaluation and Assessment of Injuries and Illnesses
- Immediate Care of Injuries
- Treatment, Rehabilitation and Reconditioning
- Health Care Organization and Administration
- Professional Development and Responsibility

As a part of the complete sports medicine team, the Certified Athletic Trainer works under the direction of a licensed physician and in cooperation with other health care professionals, athletics administrators, coaches and parents.

**Student Learning Goals & Objectives:**

Student Learning Goal 1: The student learns that the athletic trainer renders service or treatment under the direction of a physician.

Student Learning Goal 2: The student understands and uses preventive measures to ensure the highest quality of care for every patient.

Student Learning Goal 3: The student provides standard immediate care procedures used in emergency situations, independent of setting.

Student Learning Goal 4: Prior to treatment, the student assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The student follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Student Learning Goal 5: In development of a treatment program, the student determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Student Learning Goal 6: The student learns that, with collaboration of the physician, the athletic trainer recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The student also learns that the athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.
### Student Learning Goals & Objectives

Possesses the knowledge, skills and dispositions to effectively care for physically active people in various settings while conducting: prevention, immediate care, diagnostic reasoning, medical decision making, treatment and rehabilitation strategies, discontinuation, organizational and administrative tasks.

### Educational Experiences

**Course work**: classroom and lab activities for the student to develop knowledge, skills and dispositions.

**Clinical experiences**: happens every semester along with didactic teaching. Each student is assigned to an intercollegiate athletic team while supervised by a faculty member throughout the season. The student gains skills and integrate coursework into clinical situations.

**Clinical competency assessments**: are performed by the student and evaluated by faculty to ensure that the student has mastered a certain level of competency in skills and knowledge on certain aspects of athletic training which were already covered in course work. Different competencies are covered at different levels of students, and easy skills and/or less complicated material are introduced earlier in the program.

**Case studies**: are required each of three years and are designed to progressively pique student interest and stimulate critical reasoning ability each year.

**Self-assessment**: enables the student to evaluate the level of competence and familiarity in athletic training skills and knowledge appropriate for the level of the student. The self-assessment is shared with the clinical instructor every semester to minimize gaps in perception of competency and to stimulate discussion to improve the student’s clinical experience in the coming semesters.

**Web project**: is a part of a course that enables the student to integrate all components of athletic training into one written document based on an injury from its beginning (prevention and immediate care) to the end (discharge).

**Internship**: provides the student to adapt to a different environment, to learn and grow in a new system, and to develop critical reasoning.

**Senior presentation**: affords an opportunity for the student to integrate their understanding of a subject then to present in front of the fellow students and faculty. The faculty members provide guidance in preparation as well as feedback on the final performance.
<table>
<thead>
<tr>
<th><strong>Assessment Methods</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses are sequences to provide the student with progressively more complex knowledge, skills, and disposition of various aspects of athletic training throughout the student’s time in the curriculum. Many of the courses have prerequisites to each other so that the student must successfully complete one course before enrolling in another. This approach ensures that the student has gained a certain level of competence before moving onto the next level of skill and knowledge acquisition. Disposition is assessed during clinical experiences under faculty members and during self-assessment each semester. Necessary data will be shared with Assessment Committee for interpretation and evaluation.</td>
</tr>
<tr>
<td>Clinical experiences: feedback from faculty on the student’s clinical performance and needs are communicated to the Program Director who changes clinical assignments for the next semester reflecting each student’s needs.</td>
</tr>
<tr>
<td>Clinical competency assessments: evaluation of competency by faculty member. For sophomores, 100% accuracy is required (due to relatively easy level of skills and knowledge). For juniors and seniors, 85% accuracy is required to pass each competency.</td>
</tr>
<tr>
<td>Self-assessment: each item deemed appropriate for the level of the student will be used. For instance, a sophomore student may learn about importance of sphygmomanometer and its use while a junior will be asked to assess the ability to understand and operate an electrical therapeutic modality and a senior will answer about how well a head/neck injury can be assessed. Student assesses the level of competency in each item considered essential for the level. Student narrative and faculty feedback will be kept on student file.</td>
</tr>
<tr>
<td>Senior presentation: at least three faculty members are present at each senior presentation, and it is evaluated using a grading sheet. Free-form feedback on each aspect of the presentation by faculty is encouraged. Copies of the feedback/grading sheets are available to the student and faculty for future review.</td>
</tr>
<tr>
<td>ATEx: Athletic Training Clinical Experience recorded by students via handheld computer. The student’s experience at or immediately after the experience is recorded in handheld computer by the student. The results are synchronized with the server and results are available in simple statistical analyses every two weeks for the faculty. ATEx is not a tool to assess knowledge, skill, or disposition. It is a complementary tool to ensure that each student is experiencing what s/he needs. Because this system is in its initial year, only baseline data have been obtained. However, the baseline data will be useful in future years as the data will illuminate what should be considered substandard clinical involvement.</td>
</tr>
</tbody>
</table>
| Outcome assessment by graduates: recent graduates will be surveyed to find out if they found what they learned in the Athletic Training
<table>
<thead>
<tr>
<th><strong>Program</strong></th>
<th>The plans are ongoing regarding on-line data collection and subsequent analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeline</strong></td>
<td>Most items are collected every semester. ATEx clinical experience is updated every two weeks. Senior presentation feedback is collected once a year. Online assessment by graduates will be collected this summer and analyzed later in the summer.</td>
</tr>
<tr>
<td><strong>Responsibilities</strong></td>
<td>Each faculty member will collect data regarding course work and forward them to the Program Director. The Program Director presents the data to the Athletic Training Program Assessment Committee for analysis, interpretation and reporting of results. ATEx clinical experience reports will be compiled by the ATEx administrator and forwarded to the Program Director. The Program Director presents the data to the Athletic Training Assessment Committee. The results of online assessment by graduates will be compiled by the project coordinator who will forward the results to the Assessment Committee. The Assessment Committee will interpret the results, develops recommendations, and reports to the Program Director and the faculty.</td>
</tr>
<tr>
<td><strong>Use of Results And Process for Documentation &amp; Decision-Making</strong></td>
<td>Based on the data and committee recommendations, the Program Director and the faculty determines what changes should occur. Changes may occur on demand and at any time based on evidence, but program changes will be discussed and determined by all faculty in early summer for the next academic year’s implementation.</td>
</tr>
</tbody>
</table>
Introduction

The mission of the National Athletic Trainers' Association Board of Certification Inc. (BOC) is to certify athletic trainers and to identify for the public, quality healthcare professionals through a system of certification, adjudication, standards of practice and continuing competency programs. The BOC has been responsible for the certification of athletic trainers since 1969. Upon its inception, the BOC was a division of the professional membership organization the National Athletic Trainers' Association. However, in 1989, the BOC became an independent non-profit corporation.

Accordingly the BOC provides a certification program for the entry-level athletic trainer that confers the ATC® credential and establishes requirements for maintaining status as a certified athletic trainer, ATC® (to be known as “athletic trainer” from this point forward). A nine member Board of Directors governs the BOC. There are six Athletic Trainer Directors, one Physician Director, one Public Director and one Corporate/Educational Director.

The BOC is the only accredited certification program for athletic trainers in the United States. Every five years the BOC must undergo review and re-accreditation by the National Commission for Certifying agencies (NCCA). The NCCA is the accreditation body of the National Organization for Competency Assurance.

The BOC Standards of Professional Practice consists of two sections:

I. Practice Standards

II. Code of Professional Responsibility
The BOC Standards of Professional Practice

Practice Standards

Standard 1: Direction
The athletic trainer renders service or treatment under the direction of a physician.

Standard 2: Prevention
The athletic trainer understands and uses preventive measures to ensure the highest quality of care for every patient.

Standard 3: Immediate Care
The athletic trainer provides standard immediate care procedures used in emergency situations, independent of setting.

Standard 4: Clinical Evaluation and Diagnosis
Prior to treatment, the athletic trainer assesses the patient’s level of function. The patient’s input is considered an integral part of the initial assessment. The athletic trainer follows standardized clinical practice in the area of diagnostic reasoning and medical decision making.

Standard 5: Treatment, Rehabilitation and Reconditioning
In development of a treatment program, the athletic trainer determines appropriate treatment, rehabilitation and/or reconditioning strategies. Treatment program objectives include long and short-term goals and an appraisal of those which the patient can realistically be expected to achieve from the program. Assessment measures to determine effectiveness of the program are incorporated into the program.

Standard 6: Program Discontinuation
The athletic trainer, with collaboration of the physician, recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program. The athletic trainer, at the time of discontinuation, notes the final assessment of the patient’s status.

Standard 7: Organization & Administration
All services are documented in writing by the athletic trainer and are part of the patient’s permanent records. The athletic trainer accepts responsibility for recording details of the patient’s health status.