Commission on Accreditation of Athletic Training Education 2020 Standards for Accreditation of Professional Athletic Training Programs

Master's Degree Programs
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SECTION I: PROGRAM DESIGN AND QUALITY

Standard 1 The program has a written mission statement that addresses the professional preparation of athletic trainers and aligns with the mission of the institution and the program's associated organizational units.

Annotation Associated organizational units are those under which athletic training falls. For example, if an athletic training program is in a department and the department is in a school, then the mission must be congruent with these units.

Standard 2 The program has developed, implemented, and evaluated a framework that describes how the program is designed to achieve its mission and that guides program design, delivery, and assessment.

Annotation This written framework describes essential program elements and how they're connected; these elements include core principles, strategic planning, goals and expected outcomes, curricular design (for example, teaching and learning methods), curricular planning and sequencing, and the assessment plan. The framework is evaluated and refined on an ongoing basis.

The framework includes program-specific outcomes that are defined by the program; these outcomes include measures of student learning, quality of instruction, quality of clinical education, and overall program effectiveness. Programs must minimally incorporate the student achievement measures identified in Standard 6 as outcomes. Improvement plans must include targeted goals and specific action plans for the communication and implementation of the program.

Standard 3 Development, implementation, and evaluation of the framework engage all core faculty and include other stakeholders as determined by the program.

Annotation All core faculty must participate in the development, implementation, and evaluation of the framework on an ongoing basis. The nature and extent of participation by each core faculty member and other stakeholders is determined by the program.

Standard 4 The results of the program's assessment plan are used for continued program improvement.

Annotation The program analyzes the extent to which it meets its program-specific outcomes and creates an action plan for program improvement and identified deficiencies. The action plan minimally includes identification of responsible person or persons, listing of resources needed, a timeframe, and a strategy to modify the plan as needed.

Standard 5 The program collects student achievement measures on an annual basis.

Annotation The following student achievement measures must be collected:

- Program graduation rate
- Program retention rate

- Graduate placement rate
- First-time pass rate on the Board of Certification examination
- Standard 6 The program meets or exceeds a three-year aggregate of 70% first-time pass rate on the BOC examination.
- Annotation Procedures for review and action on this standard are described in the CAATE policies and procedures manual.
- Standard 7 Programs that have a three-year aggregate BOC examination first-time pass rate below 70% must provide an analysis of deficiencies and develop and implement an action plan for correction of BOC-examination pass-rate deficiency.
- Annotation This standard only applies in the event that a program is not compliant with Standard 6.
- SECTION II PROGRAM DELIVERY
- Standard 8 Planned interprofessional education is incorporated within the professional program.
- Annotation Varying methods can be used to incorporate <u>interprofessional education</u>. To meet this standard, each student in the program must have multiple exposures to <u>interprofessional education</u>.
- Standard 9 All courses used to fulfill athletic training clinical experience requirements and to meet the curricular content standards (Standards 56 through 94) are delivered at the graduate level.
- Annotation Graduate-level courses award graduate credit. The determination of whether a course is graduate level is made by the institution.
- Standard 10 Students fulfill all athletic training clinical experience requirements and curricular content standards (Standards 56 through 94) within the professional program.
- Annotation Fulfillment of athletic training clinical experience requirements and curricular content standards prior to enrollment in the professional program is not sufficient to meet this standard. Athletic training clinical experiences must occur throughout the professional program.
- Standard 11 The program uses clearly written syllabi for all courses that are part of the professional program.
- Annotation Course syllabi include clearly written course objectives, assessment methods, and a daily/weekly schedule. Each syllabus includes sufficient information in the objectives and the daily/weekly schedule to ascertain the curricular content (see Section IV) that is being taught in the course.
- Standard 12 Course credits are consistent with institutional policy or institutional practice.
- Annotation Policy or practice must address credit allocation for all types of courses (for example, didactic, practicum, with associated athletic training and/or supplemental clinical experience components).
- Standard 13 The program ensures that the time commitment for completing program requirements does not adversely affect students' progression through the program.
- Annotation The program must identify policies and procedures used to ensure that students' program-related time commitments, including time spent in athletic training and supplemental clinical experiences, are not excessive.

- Standard 14 A program's clinical education requirements are met through graduate courses and span a minimum of two academic years.
- Standard 15 A program's athletic training clinical experiences and supplemental clinical experiences provide a logical progression of increasingly complex and autonomous patient-care and client-care experiences.
- Standard 16 The clinical education component is planned to include at least one athletic training immersive clinical experience.
- Annotation An athletic training immersive clinical experience is a practice-intensive experience that allows the student to experience the totality of care provided by athletic trainers. Students must participate in the day-to-day and week-to-week role of an athletic trainer for a period of time identified by the program (but minimally one continuous four-week period).
- Standard 17 A program's clinical education component is planned to include clinical practice opportunities with varied client/patient populations. Populations must include clients/patients
 - throughout the lifespan (for example, pediatric, adult, elderly),
 - of different sexes,
 - with different socioeconomic statuses,
 - of varying levels of activity and athletic ability (for example, competitive and recreational, individual and team activities, high- and low-intensity activities),
 - who participate in nonsport activities (for example, participants in military, industrial, occupational, leisure activities, performing arts).

Annotation These clinical practice opportunities should occur in athletic training clinical experiences with real clients/patients in settings where athletic trainers commonly practice. When this is not possible, the program may use simulation to meet portions of this standard. Students must have adequate real client/patient interactions (athletic training clinical experiences) to prepare them for contemporary clinical practice with a variety of patient populations.

Standard 18 Students gain experience with patients with a variety of health conditions commonly seen in athletic training practice.

Annotation Athletic trainers routinely practice in the areas of prevention and wellness, urgent and emergent care, primary care, orthopedics, rehabilitation, behavioral health, pediatrics, and performance enhancement. Within these areas of athletic training practice, the athletic training clinical experience provides students with opportunities to engage with patients with emergent, behavioral (mental health), musculoskeletal, neurological, endocrine, dermatological, cardiovascular, respiratory, gastrointestinal, genitourinary, otolaryngological, ophthalmological, dental, and environmental conditions. When specific opportunities are not possible, programs may use simulation to meet portions of this standard. Students must have adequate patient/client interactions (athletic training clinical experiences) to prepare them for contemporary clinical practice with patients with a variety of health conditions commonly seen in athletic training practice.

SECTION III: INSTITUTIONAL ORGANIZATION AND ADMINISTRATION

- Standard 19 The sponsoring institution is accredited by an agency recognized by the United States Department of Education or by the Council for Higher Education Accreditation and must be legally authorized to provide a program of postsecondary education. For programs outside of the United States, the institution must be authorized to provide postsecondary education, and the program must be delivered in the English language.
- Standard 20 Professional programs result in the granting of a master's degree in athletic training. The program must be identified as an academic athletic training degree in institutional publications.
- Annotation The CAATE recommends a Master of Athletic Training degree. The degree must appear on the official transcript, similar to normal designations for other degrees at the institution. International programs must use language consistent with the host country's nomenclature and have CAATE approval of that language.
- Standard 21 The program is administratively housed with similar health care profession programs that are subject to specialized programmatic accreditation.
- Annotation The intent of this standard is to ensure the professional socialization of the athletic training program faculty and students within a health care profession culture. If the institution offers no other health care profession programs, or the athletic training program is not administratively housed with similar health care profession programs, explain how the existing organizational structure meets the intent of this standard.
- Standard 22 All sites where students are involved in clinical education (excluding the sponsoring institution) have a current affiliation agreement or memorandum of understanding that is endorsed by the appropriate administrative authority at both the sponsoring institution and site.
- Annotation
 When the administrative oversight of the preceptor differs from the affiliate site, affiliation agreements or memoranda of understanding must be obtained from all parties. All sites (excluding the sponsoring institution) must have affiliation agreements or memoranda of understanding. Any experience the student completes to meet clinical education requirements as an athletic training student must have an agreement. Credit and noncredit athletic training clinical experiences or supplemental clinical experiences, including internships, must have affiliation agreements or memoranda of understanding.
- Standard 23 The institution/program has written policies and procedures that ensure the rights and responsibilities of program students. These policies and procedures are available to the public and must include the following:
 - 23A Academic dishonesty policy
 - 23B Grievance policy
 - 23C Matriculation requirements
 - 23D Nondiscrimination policies
 - 23E Policies for student withdrawal and refund of tuition and fees
 - 23F Technical standards or essential functions

Annotation: Policies and procedures may be institutional and not specific to the athletic training program.

- Standard 24 Prospective and enrolled students are provided with relevant and accurate information about the institution and program. These policies and procedures are available to the public and must include the following:
 - 24A Academic calendars
 - 24B Academic curriculum and course sequence

- 24C Admissions process (including prerequisite courses)
- 24D All costs associated with the program, including (but not limited to) tuition, fees, refund policies, travel costs, and clothing
- 24E Catalogs
- 24F Criminal background check policies
- 24G Degree requirements
- 24H Financial aid
- 24I Grade policies
- 24J Immunization requirements
- 24K Information about athletic training and supplemental clinical experiences, including travel expectations to clinical sites
- 24L Matriculation requirements
- 24M Nondiscrimination policies
- 24N Procedures governing the award of available funding for scholarships
- 240 Program mission, goals, and expected outcomes
- 24P Recruitment and admissions information, including admissions criteria, policies regarding transfer of credit, and any special considerations used in the process
- 24Q Technical standards or essential functions

Annotation: Information may be institutional and not specific to the athletic training program.

Standard 25 The program posts data detailing its student achievement measures.

Annotation: Data on the following student achievement measures (stated in Standard 5) for the past three years must be posted on, or directly linked from, the program's home page:

- Program graduation rate
- Program retention rate
- Graduate placement
- First-time pass rate on the Board of Certification examination
- Standard 26 Students are protected by and have access to written policies and procedures that protect the health and safety of clients/patients and the student. At a minimum, the policies and procedures must address the following:
 - 26A A mechanism by which clients/patients can differentiate students from credentialed providers
 - 26B A requirement for all students to have emergency cardiac care training before engaging in athletic training and supplemental clinical experiences
 - 26C Blood-borne pathogen protection and exposure plan procedures that are immediately accessible (including requirements that students receive training, before being placed in a potential exposure situation and annually thereafter, and that students have access to and use of appropriate blood-borne pathogen barriers and control measures at all sites)
 - 26D Calibration and maintenance of equipment according to manufacturer guidelines
 - 26E Communicable and infectious disease transmission procedures that are immediately accessible
 - 26F Immunization requirements for students
 - 26G Patient/client privacy protection (FERPA and HIPAA)
 - 26H Radiation exposure (as applicable) procedures that are immediately accessible
 - 261 Sanitation precautions, including ability to clean hands before and after patient encounters
 - 26J Venue-specific training expectations (as required)
 - 26K Venue-specific critical incident response procedures (for example, emergency action plans) that are immediately accessible to students in an emergency situation

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Annotation: These policies and procedures pertain to all learning environments where students are involved in real or simulated client/patient care (including teaching laboratories). Inherent in the development of policies and procedures is the expectation that they are implemented.

Standard 27 The institution/program maintains appropriate student records in secure locations. Student records must include the following:

- 27A Program admissions applications
- 27B Progression through the curriculum
- 27C Disciplinary actions (if applicable)
- 27D Clinical placements
- 27E Verification of annual blood-borne pathogen training
- 27F Verification of compliance with the program's technical standards requirements
- 27G Verification of completed criminal background checks (if applicable)
- 27H Verification of privacy training (for example, HIPAA and FERPA, as applicable)
- 271 Verification of notification of communicable/infectious disease transmission policy and postexposure plan
- 27J Compliance with immunization policies
- 27K Verification that the program's students are protected by professional liability insurance

Standard 28 Admission of students to the professional program is made in accordance with the program's identified criteria and processes, which are made publicly available.

Annotation: Admissions criteria and processes must be consistently reported anywhere they are published.

Standard 29 The program ensures that each student is oriented to the policies and procedures of their clinical site.

Annotation: Orientations must occur at the start of the experience and before a client/patient encounter at the site. The orientation for athletic training and supplemental clinical experiences must include (but is not limited to) the following:

- Critical incident response procedures (for example, emergency action plans)
- Blood-borne pathogen exposure plan
- Communicable and infectious disease policies
- Documentation policies and procedures
- Patient privacy and confidentiality protections
- Plan for clients/patients to be able to differentiate practitioners from students

The orientation for other clinical education opportunities that involve client/patients may vary based on the nature of the experience.

Standard 30 Educational opportunities and placements are not prejudicial or discriminatory.

Standard 31 Athletic training clinical experiences are supervised by a preceptor who is an athletic trainer or a physician.

Annotation: Note that supplemental clinical experience opportunities involve other health care providers as preceptors, but these opportunities would not fulfill clinical experience requirements as defined in Standards 56 through 94.

Standard 32 Regular and ongoing communication occurs between the program and each preceptor.

Annotation All parties are informed about the program framework, individual student needs, student progress, and assessment procedures. The regularity and nature of communication is defined by the program.

Standard 33 All active clinical sites are evaluated by the program on an annual basis.

Annotation The program determines the nature and components of the evaluation. These sites include those at the sponsoring institution. Active clinical sites are those where students have been placed during the current academic year.

Standard 34 All program policies, procedures, and practices are applied consistently and equitably.

Annotation This standard provides a mechanism for programs to respond to inquiries about compliance with program policies. Programs are not required to submit evidence of compliance for this standard within a self-study. Evidence of compliance is required only when programs are responding to specific inquiry about potential noncompliance. The nature of evidence requested will depend on the nature of the inquiry.

Standard 35 Program policies, procedures, and practices provide for compliance with accreditation policies and procedures, including the following:

- Maintenance of accurate information, easily accessible to the public, on the program website regarding accreditation status and current student achievement measures
- Timely submission of required fees and documentation, including reports of program graduation rates and graduate placement rates
- Timely notification of expected or unexpected substantive changes within the program and of any change in institutional accreditation status or legal authority to provide postsecondary education

Annotation: Associated due dates are established by the CAATE and are available in the CAATE Policy and Procedure manual. Programs are not required to submit evidence of compliance for this standard within a self-study. Evidence of compliance is required only when programs are responding to specific inquiry from the CAATE about potential noncompliance. The nature of evidence requested will depend on the nature of the inquiry.

Standard 36 The program/institution demonstrates honesty and integrity in all interactions that pertain to the athletic training program.

Annotation Programs are not required to submit initial evidence of compliance for this standard within a self-study. Evidence of compliance is required only when programs are responding to specific inquiry from the CAATE about potential noncompliance. The nature of evidence requested will be dependent on the nature of the inquiry.

Standard 37 The program director is a full-time faculty member whose primary assignment is to the athletic training program. The program director's experience and qualifications include the following:

- An earned doctoral degree
- Contemporary expertise in the field of athletic training
- Certification and good standing with the Board of Certification
- Current state athletic training credential and good standing with the state regulatory agency in the state in which the program is housed (in states with regulation)
- Previous clinical practice as an athletic trainer
- Scholarship
- Previous full-time academic appointment with teaching responsibilities at the postsecondary level

Annotation: The program director's faculty status, rights, and responsibilities are consistent with similar positions at the institution and provide appropriate program representation in institutional decisions.

Any person who is employed as a program director in a CAATE-accredited program as of July 1, 2020, will remain eligible for employment as a program director at a CAATE-accredited institution without an earned doctoral degree.

Standard 38 The program director is responsible for the management and administration of the program. This includes the following responsibilities:

- Program planning and operation, including development of the framework
- Program evaluation
- Maintenance of accreditation
- Input into budget management
- Input on the selection of program personnel
- Input on the evaluation of program personnel

Standard 39 The coordinator of clinical education is a core faculty member whose primary appointment is to the athletic training program and who has responsibility to direct clinical education. The coordinator of clinical education's experience and qualifications include the following:

- Contemporary expertise in athletic training
- Certification and good standing with the Board of Certification
- Possession of a current state athletic training credential and good standing with the state regulatory agency in the state in which the program is housed (in states with regulation)
- Previous clinical practice in athletic training

Annotation: The title of this individual is determined by the institution, and the position should be consistent with the responsibilities of others at the institution who have similar roles. This individual is not the same person as the program director.

Standard 40 The coordinator of clinical education is responsible for oversight of the clinical education portion of the program. This includes the following responsibilities:

- Oversight of student clinical progression
- Student assignment to athletic training clinical experiences and supplemental clinical experiences
- Clinical site evaluation
- Student evaluation
- Regular communication with preceptors
- Professional development of preceptors
- Preceptor selection and evaluation

Annotation: Communication with the preceptors includes familiarizing them with the program framework.

Professional development of preceptors is specific to development of their role as preceptor.

Standard 41 Program faculty numbers are sufficient to meet the needs of the athletic training program and must include a minimum of three core faculty.

Annotation Program faculty may include core faculty, associated faculty, and adjunct faculty. The needs of the program include advising and mentoring students, meeting program outcomes, scholarship, program administration, recruiting and admissions, and offering courses on a regular and planned basis.

Programs are required to have sufficient numbers of faculty to meet the needs of the athletic training program by the date of the implementation of these standards. Compliance with the requirement that the program has a minimum of three core faculty is required after July 1, 2023. Until July 1, 2023 programs will be required to maintain compliance with the 2012 Standard (Standard 30) requiring a minimum of two core faculty.

- Standard 42 The core faculty have contemporary expertise in assigned teaching areas, demonstrated effectiveness in teaching, and evidence of scholarship.
- Standard 43 The program director, coordinator of clinical education, and other core faculty have assigned load that is sufficient to meet the needs of the program.
- Annotation: Faculty may have other institutional duties that do not interfere with the management, administration, and delivery of the program. Assigned load must be comparable to other faculty with similar roles within the institution or at other peer institutions.
- Standard 44 All faculty who instruct athletic training skills necessary for direct patient care must possess a current state credential and be in good standing with the state regulatory agency (in states where their profession is regulated). In addition, faculty who are solely credentialed as athletic trainers and who teach skills necessary for direct patient care must be BOC certified.
- Standard 45 Preceptors are health care providers whose experience and qualifications include the following:
 - Licensure as a health care provider, credentialed by the state in which they practice (where regulated)
 - BOC certification in good standing and state credential (in states with regulation) for preceptors who are solely credentialed as athletic trainers
 - Planned and ongoing education for their role as a preceptor
 - Contemporary expertise
- Annotation: Preceptor education is designed to promote an effective learning environment and may vary based on the educational expectations of the experiences. The program must have a plan for ongoing preceptor training.
- Standard 46 Preceptors function to supervise, instruct, and mentor students during clinical education in accordance with the program's policies and procedures. Preceptors who are athletic trainers or physicians assess students' abilities to meet the curricular content standards (Standards 56 through 94).
- Standard 47 The number and qualifications of preceptors are sufficient to meet the clinical education needs of the program.
- Standard 48 Program faculty and preceptors receive regular evaluations and feedback on their performance pertaining to quality of instruction and student learning.
- Annotation: This evaluation process should be incorporated into the assessment plan that is a component of the framework (see Standard 2). The program must determine the regularity with which faculty and preceptors are evaluated.

- Standard 49 The program has a medical director who is actively involved in the program.
- Annotation: The medical director supports the program director in ensuring that both didactic instruction and athletic training and supplemental clinical experiences meet current practice standards as they relate to the athletic trainer's role in providing client/patient care.
- Standard 50 The program has administrative and technical support staff to meet its expected program outcomes and professional education, scholarship, and service goals.
- Standard 51 The available technology, the physical environment, and the equipment are of sufficient quality and quantity to meet program needs, including the following:
 - 51A Classrooms and labs are of adequate number and size to accommodate the number of students, and they are available for exclusive use during class times.
 - 51B Necessary equipment required for teaching a contemporary athletic training curriculum is provided.
 - Offices are provided for program staff and faculty on a consistent basis to allow program administration and confidential student counseling.
 - 51D The available technology is adequate to support effective teaching and learning.
- Annotation If a program incorporates remote learning or multi-campus locations, the evidence of compliance should describe how these standards are met at all locations.
- Standard 52 The program's students have sufficient access to advising, counseling services, health services, disability services, and financial aid services.
- Annotation Availability of student support services at remote locations (for example, during athletic training and supplemental clinical experiences) must be comparable to those for students located on campus.
- Standard 53 Financial resources are adequate to achieve the program's stated mission, goals, and expected program outcomes.
- Annotation: Funding must be available for expendable supplies, equipment maintenance and calibration, course instruction, operating expenses, faculty professional development, and capital equipment.

SECTION IV: CURRICULAR CONTENT

Prerequisite Coursework and Foundational Knowledge

- Standard 54 The professional program requires prerequisite classes in biology, chemistry, physics, psychology, anatomy, and physiology at the postsecondary level.
- Annotation The program determines the classes that meets these standards and supports the program's curricular plan. Additional prerequisite coursework may be required as determined by the program.
- Standard 55 Students must gain foundational knowledge in statistics, research design, epidemiology, pathophysiology, biomechanics and pathomechanics, exercise physiology, nutrition, human anatomy, pharmacology, public health, and health care delivery and payor systems.

Annotation Foundational knowledge areas can be incorporated as prerequisite coursework, as a component of the professional program, or both.

The professional program content will prepare the graduate to do the following:

Core Competencies

Core Competencies: Patient-Centered Care

Standard 56 Advocate for the health needs of clients, patients, communities, and populations.

Annotation: Advocacy encompasses activities that promote health and access to health care for individuals, communities, and the larger public.

Standard 57 Identify health care delivery strategies that account for health literacy and a variety of social determinants of health.

Standard 58 Incorporate patient education and self-care programs to engage patients and their families and friends to participate in their care and recovery.

Standard 59 Communicate effectively and appropriately with clients/patients, family members, coaches, administrators, other health care professionals, consumers, payors, policy makers, and others.

Standard 60 Use the International Classification of Functioning, Disability, and Health (ICF) as a framework for delivery of patient care and communication about patient care.

Core Competencies: Interprofessional Practice and Interprofessional Education

Standard 61 Practice in collaboration with other health care and wellness professionals.

Core Competencies: Evidence-Based Practice

Standard 62 Provide athletic training services in a manner that uses evidence to inform practice.

Annotation: Evidence-based practice includes using best research evidence, clinical expertise, and patient values and circumstances to connect didactic content taught in the classroom to clinical decision making.

Core Competencies: Quality Improvement

Standard 63 Use systems of quality assurance and quality improvement to enhance client/patient care.

Core Competencies: Health Care Informatics

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Standard 64 Apply contemporary principles and practices of health informatics to the administration and delivery of patient care, including (but not limited to) the ability to do the following:

- Use data to drive informed decisions
- Search, retrieve, and use information derived from online databases and internal databases for clinical decision support
- Maintain data privacy, protection, and data security
- Use medical classification systems (including International Classification of Disease codes) and terminology (including Current Procedural Terminology)
- Use an electronic health record to document, communicate, and manage health-related information; mitigate error; and support decision making.

Core Competencies: Professionalism

Standard 65 Practice in a manner that is congruent with the ethical standards of the profession.

Standard 66 Practice health care in a manner that is compliant with the BOC Standards of Professional Practice and applicable institutional/organizational, local, state, and federal laws, regulations, rules, and guidelines. Applicable laws and regulations include (but are not limited to) the following:

- Requirements for physician direction and collaboration
- Mandatory reporting obligations
- Health Insurance Portability and Accountability Act (HIPAA)
- Family Education Rights and Privacy Act (FERPA)
- Universal Precautions/OSHA Bloodborne Pathogen Standards
- Regulations pertaining to over-the-counter and prescription medications

Standard 67 Self-assess professional competence and create professional development plans according to personal and professional goals and requirements.

Standard 68 Advocate for the profession.

Annotation Advocacy for the profession takes many shapes. Examples include educating the general public, public sector, and private sector; participating in the legislative process; and promoting the need for athletic trainers.

Patient/Client Care

Care Plan

Standard 69 Develop a care plan for each patient. The care plan includes (but is not limited to) the following:

- Assessment of the patient on an ongoing basis and adjustment of care accordingly
- Collection, analysis, and use of patient-reported and clinician-rated outcome measures to improve patient care
- Consideration of the patient's goals and level of function in treatment decisions
- Discharge of the patient when goals are met or the patient is no longer making progress
- Referral when warranted

Examination, Diagnosis, and Intervention

Standard 70 Evaluate and manage patients with acute conditions, including triaging conditions that are life threatening or otherwise emergent. These include (but are not limited to) the following conditions:

- Cardiac compromise (including emergency cardiac care, supplemental oxygen, suction, adjunct airways, nitroglycerine, and low-dose aspirin)
- Respiratory compromise (including use of pulse oximetry, adjunct airways, supplemental oxygen, spirometry, meter-dosed inhalers, nebulizers, and bronchodilators)
- Conditions related to the environment: lightning, cold, heat (including use of rectal thermometry)
- Cervical spine compromise
- Traumatic brain injury
- Internal and external hemorrhage (including use of a tourniquet and hemostatic agents)
- Fractures and dislocations (including reduction of dislocation)
- Anaphylaxis (including administering epinephrine using automated injection device)
- Exertional sickling, rhabdomyolysis, and hyponatremia
- Diabetes (including use of glucometer, administering glucagon, insulin)
- Drug overdose (including administration of rescue medications such as naloxone)
- Wounds (including care and closure)
- Testicular injury
- Other musculoskeletal injuries

Standard 71 Perform an examination to formulate a diagnosis and plan of care for patients with health conditions commonly seen in athletic training practice. This exam includes the following:

- Obtaining a medical history from the patient or other individual
- Identifying comorbidities and patients with complex medical conditions
- Assessing function (including gait)
- Selecting and using tests and measures that assess the following, as relevant to the patient's clinical presentation:
 - Cardiovascular system (including auscultation)
 - Endocrine system
 - Eyes, ears, nose, throat, mouth, and teeth
 - Gastrointestinal system
 - Genitourinary system
 - Integumentary system
 - Mental status
 - Musculoskeletal system
 - Neurological system
 - o Pain level
 - Reproductive system
 - Respiratory system (including auscultation)
 - Specific functional tasks
- Evaluating all results to determine a plan of care, including referral to the appropriate provider when indicated

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- Standard 72 Perform or obtain the necessary and appropriate diagnostic or laboratory tests—including (but not limited to) imaging, blood work, urinalysis, and electrocardiogram—to facilitate diagnosis, referral, and treatment planning.
- Standard 73 Select and incorporate interventions (for pre-op patients, post-op patients, and patients with nonsurgical conditions) that align with the care plan. Interventions include (but are not limited to) the following:
 - Therapeutic and corrective exercise
 - Joint mobilization and manipulation
 - Soft tissue techniques
 - Movement training (including gait training)
 - Motor control/proprioceptive activities
 - Task-specific functional training
 - Therapeutic modalities
 - Home care management
 - Cardiovascular training
- Standard 74 Educate patients regarding appropriate pharmacological agents for the management of their condition, including indications, contraindications, dosing, interactions, and adverse reactions.
- Standard 75 Administer medications or other therapeutic agents by the appropriate route of administration upon the order of a physician or other provider with legal prescribing authority.
- Standard 76 Evaluate and treat a patient who has sustained a concussion or other brain injury, with consideration of established guidelines:
 - Performance of a comprehensive examination designed to recognize concussion or other brain injury, including (but not limited to) neurocognitive evaluation, assessment of the vestibular and vision systems, cervical spine involvement, mental health status, sleep assessment, exertional testing, nutritional status, and clinical interview
 - Re-examination of the patient on an ongoing basis
 - Recognition of an atypical response to brain injury
 - Implementation of a plan of care (addressing vestibular and oculomotor disturbance, cervical spine pain, headache, vision, psychological needs, nutrition, sleep disturbance, exercise, academic and behavioral accommodations, and risk reduction)
 - Return of the patient to activity/participation
 - Referral to the appropriate provider when indicated
- Standard 77 Identify, refer, and give support to patients with behavioral health conditions. Work with other health care professionals to monitor these patients' treatment, compliance, progress, and readiness to participate.
- Annotation These behavioral health conditions include (but are not limited to) suicidal ideation, depression, anxiety disorder, psychosis, mania, eating disorders, and attention deficit disorders.
- Standard 78 Select, fabricate, and/or customize prophylactic, assistive, and restrictive devices, materials, and techniques for incorporation into the plan of care, including the following:
 - Durable medical equipment

- Orthotic devices
- Taping, splinting, protective padding, and casting

Prevention, Health Promotion, and Wellness

Standard 79 Develop and implement strategies to mitigate the risk for long-term health conditions across the lifespan. These include (but are not limited to) the following conditions:

- Adrenal diseases
- Cardiovascular disease
- Diabetes
- Neurocognitive disease
- Obesity
- Osteoarthritis

Standard 80 Develop, implement, and assess the effectiveness of programs to reduce injury risk.

Standard 81 Plan and implement a comprehensive preparticipation examination process to affect health outcomes.

Standard 82 Develop, implement, and supervise comprehensive programs to maximize sport performance that are safe and specific to the client's activity.

Standard 83 Educate and make recommendations to clients/patients on fluids and nutrients to ingest prior to activity, during activity, and during recovery for a variety of activities and environmental conditions.

Standard 84 Educate clients/patients about the effects, participation consequences, and risks of misuse and abuse of alcohol, tobacco, performance-enhancing drugs/substances, and over-the-counter, prescription, and recreational drugs.

Standard 85 Monitor and evaluate environmental conditions to make appropriate recommendations to start, stop, or modify activity in order to prevent environmental illness or injury.

Standard 86 Select, fit, and remove protective equipment to minimize the risk of injury or re-injury.

Standard 87 Select and use biometrics and physiological monitoring systems and translate the data into effective preventive measures, clinical interventions, and performance enhancement.

Health Care Administration

- Standard 88 Perform administrative duties related to the management of physical, human, and financial resources in the delivery of health care services. These include (but are not limited to) the following duties:
 - Strategic planning and assessment
 - Managing a physical facility that is compliant with current standards and regulations
 - Managing budgetary and fiscal processes
 - Identifying and mitigating sources of risk to the individual, the organization, and the community
 - Navigating multipayor insurance systems and classifications
 - Implementing a model of delivery (for example, value-based care model)
- Standard 89 Use a comprehensive patient-file management system (including diagnostic and procedural codes) for documentation of patient care and health insurance management.

Standard 90 Establish a working relationship with a directing or collaborating physician.

Annotation This standard is specific to preparing an athletic trainer to fulfill the Board of Certification Standards of Professional Practice, specifically Standard 1, "The Athletic Trainer renders service or treatment under the direction of, or in collaboration with a physician, in accordance with their training and the state's statutes, rules and regulations."

- Standard 91 Develop, implement, and revise policies and procedures to guide the daily operation of athletic training services.
- Annotation Examples of daily operation policies include pharmaceutical management, physician referrals, and inventory management.
- Standard 92 Develop, implement, and revise policies that pertain to prevention, preparedness, and response to medical emergencies and other critical incidents.
- Standard 93 Develop and implement specific policies and procedures for individuals who have sustained concussions or other brain injuries, including the following:
 - Education of all stakeholders
 - Recognition, appraisal, and mitigation of risk factors
 - Selection and interpretation of baseline testing
 - Agreement on protocols to be followed, including immediate management, referral, and progressive return to activities of daily living, including school, sport, occupation, and recreation
- Standard 94 Develop and implement specific policies and procedures for the purposes of identifying patients with behavioral health problems and referring patients in crisis to qualified providers.

Glossary

Academic year: Customary annual period of sessions at an institution. The academic year is defined by the institution.

Action plan for correction of BOC examination pass-rate deficiency:

- A. A review and analysis of the program's previously submitted action plans. This should include
 - 1. any assessment data used to evaluate the previous action plan,
 - 2. a discussion of strategies that have and have not worked, and
 - 3. any revisions that have been made to the previous action plan based on subsequent assessment data.
- B. Analysis of the program's current BOC examination pass rate (for the most recent three years) and progress toward compliance, including
 - 1. the number of students enrolled in the program in each of the past three years,
 - 2. the number of students who have attempted the exam in each of the past three years,
 - 3. the cohort-by-cohort first-time pass rate for each of the past three exam cohorts, and
 - 4. the three-year aggregate first-time pass rate for each of the past three years.
- C. Projection for the program's anticipated exam outcomes for next year.

This is an analysis of how well the program believes its new action plan (see below) will improve exam performance for the next exam cohort and how they expect this to affect their three-year aggregate first-time pass rate in the next year. The analysis must include

- 1. an analysis of the number of students expected to take the exam in the next year, based on current enrollment;
- 2. a conservative estimated annual first-time pass rate for the upcoming year, given the steps outlined in the action plan (see below) and current student potential;
- 3. a conservative estimated three-year aggregate first-time pass rate for the upcoming year, based on the projection provided (see above); and
- 4. a narrative discussing the likelihood that the program will come into compliance with Standard 6 in the next year, given the data provided in C.1, C.2, and C.3 above.

The action plan, developed as part of the analytic progress report, must include all of the elements identified in Standard 5. These include

- 1. developing targeted goals and action plans to achieve the desired outcomes,
- 2. stating the time lines for reaching the outcomes, and
- 3. identifying the person or persons responsible for each element of the action plan.
- D. Updating the elements of the action plan as they are met or as circumstances change.

Adjunct faculty: Individuals contracted to provide course instruction on a full-course or partial-course basis but whose primary employment is elsewhere inside or outside the institution. Adjunct faculty may be paid or unpaid.

Affiliation agreement: A formal agreement between the program's institution and a facility where the program wants to send its students for course-related and required off-campus clinical education. This agreement defines the roles and responsibilities of the host site, the affiliate, and the student. *See also* Memorandum of understanding.

Assessment plan: A description of the process used to evaluate the extent to which the program is meeting its stated educational mission, goals, and outcomes. The assessment plan involves the collection of information from a variety of sources and must incorporate assessment of the quality of instruction (didactic and clinical), quality of clinical education, student learning, and overall program effectiveness. The formal assessment plan must also include the required student achievement measures identified in Standard 5. The assessment plan is part of the framework.

Associated faculty: Individuals with a split appointment between the program and another institutional entity (for example, athletics, another program, or another institutional department). These faculty members may be evaluated and assigned responsibilities by multiple supervisors.

Athletic trainer: Health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education and training and the state's statutes, rules, and regulations. As a part of the health care team, services provided by athletic trainers include primary care, injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions. An athletic trainer is state credentialed (in states with regulation), certified, and in good standing with the Board of Certification.

Athletic training clinical experiences: Direct client/patient care guided by a preceptor who is an athletic trainer or physician. Athletic training clinical experiences are used to verify students' abilities to meet the curricular content standards. When direct client/patient care opportunities are not available, simulation may be used for this verification. See also Clinical education.

Biometrics: Measurement and analysis of physical characteristics and activity.

Clinical education: A broad umbrella term that includes three types of learning opportunities to prepare students for independent clinical practice: athletic training clinical experiences, simulation, and supplemental clinical experiences.

Clinical site: A facility where a student is engaged in clinical education.

Contemporary expertise: Knowledge and training of current concepts and best practices in routine areas of athletic training, which can include prevention and wellness, urgent and emergent care, primary care, orthopedics, rehabilitation, behavioral health, pediatrics, and performance enhancement. Contemporary expertise is achieved through mechanisms such as advanced education, clinical practice experiences, clinical research, other forms of scholarship, and continuing education. It may include specialization in one or more of the identified areas of athletic training practice. An individual's role within the athletic training program should be directly related to the person's contemporary expertise.

Core faculty: Faculty with full faculty status, rights, responsibilities, privileges, and college voting rights as defined by the institution and who have primary responsibility to the program. These faculty members are appointed to teach athletic training courses, advise, and mentor students in the athletic training program. Core, full-time faculty report to, are evaluated by, and are assigned responsibilities by the administrator (chair or dean), in consultation with the program director, of the academic unit in which the program is housed. A core faculty member must be an athletic trainer or physician.

Durable medical equipment: Equipment that can withstand repeated use, is primarily and customarily used to serve a medical purpose, is generally not useful to a person in the absence of an illness or injury, and is appropriate for use in the home.²

Electronic health record: A real-time, patient-centered, and HIPAA-compliant digital version of a patient's paper chart that can be created and managed by authorized providers across more than one health care organization.

Evidence-based practice: The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of an individual patient. The practice of evidence-based medicine involves the integration of individual clinical expertise with the best available external clinical evidence from systematic research. Evidence-based practice involves the integration of best research evidence with clinical expertise and patient values and circumstances to make decisions about the care of individual patients.³

Faculty: See Adjunct faculty; Associated faculty; Core faculty.

First-time pass rate on the Board of Certification examination: The percentage of students who take the Board of Certification examination and pass it on the first attempt. Programs must post the following data for the past three years on their website: the number of students graduating from the program who took the examination; the number and percentage of students who passed the examination on the first attempt; and the overall number and percentage of students who passed the examination, regardless of the number of attempts.

Foundational knowledge: Content that serves as the basis for applied learning in an athletic training curriculum.

Framework: A description of essential program elements and how they're connected, including core principles, strategic planning, curricular design (for example, teaching and learning methods), curricular planning and sequencing, and the assessment plan (including goals and outcome measures).

Goals: Specific statements of educational intention that describe what must be achieved for a program to meet its mission.

Graduate placement rate: Percentage of students within six months of graduation who have obtained positions in the following categories: employed as an athletic trainer, employed as other, and not employed. Programs must post the following data for the past three years on their website: the number of students who graduated from the program, the number and percentage of students employed as an athletic trainer, the number and percentage of students employed as other, and the number and percentage of students not employed.

Health care providers: Individuals who hold a current credential to practice the discipline in the state and whose discipline provides direct patient care in a field that has direct relevancy to the practice and discipline of athletic training. These individuals may or may not hold formal appointments to the instructional faculty.

Health care informatics: The interdisciplinary study of the design, development, adoption, and application of information-technology-based innovations in the delivery, management, and planning of health care services.⁴

Health literacy: The degree to which an individual has the capacity to obtain, process, and understand basic health information and services in order to make appropriate health decisions.⁵

Immersive clinical experience: A practice-intensive experience that allows the student to experience the totality of care provided by athletic trainers.

International Classification of Functioning, Disability, and Health (ICF): A conceptual model that provides a framework for clinical practice and research. The ICF is the preferred model for the athletic training profession.⁶

Interprofessional education: When students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes.⁷

Interprofessional practice: The ability to interact with, and learn with and from, other health professionals in a manner that optimizes the quality of care provided to individual patients.

Medical director: Currently licensed allopathic or osteopathic physician who is certified by an ABMS- or AOA-approved specialty board and who serves as a resource regarding the program's medical content.

Memorandum of understanding: Document describing a bilateral agreement between parties. This document generally lacks the binding power of a contract.

Mission: A formal summary of the aims and values of an institution or organization, college/division, department, or program.

Outcomes: Indicators of achievement that may be quantitative or qualitative.

Patient-centered care: Care that is respectful of, and responsive to, the preferences, needs, and values of an individual patient, ensuring that patient values guide all clinical decisions. Patient-centered care is characterized by efforts to clearly inform, educate, and communicate with patients in a compassionate manner. Shared decision making and management are emphasized, as well as continuous advocacy of injury and disease prevention measures and the promotion of a healthy lifestyle.⁸

Physician: Health care provider licensed to practice allopathic or osteopathic medicine.

Physiological monitoring systems: Ongoing measurement of a physiological characteristic. Examples include heart rate monitors, pedometers, and accelerometers.

Preceptor: Preceptors supervise and engage students in clinical education. All preceptors must be licensed health care professionals and be credentialed by the state in which they practice. Preceptors who are athletic trainers are state credentialed (in states with regulation), certified, and in good standing with the Board of Certification. A preceptor's licensure must be appropriate to his or her profession. Preceptors must not be currently enrolled in the professional athletic training program at the institution. Preceptors for athletic training clinical experiences identified in Standards 14 through 18 must be athletic trainers or physicians.

Professionalism: Relates to personal qualities of honesty, reliability, accountability, patience, modesty, and self-control. It is exhibited through delivery of patient-centered care, participation as a member of an interdisciplinary team, commitment to continuous quality improvement, ethical behavior, a respectful demeanor toward all persons, compassion, a willingness to serve others, and sensitivity to the concerns of diverse patient populations.⁹

Professional preparation: The preparation of a student who is in the process of becoming an athletic trainer (AT). Professional education culminates with eligibility for Board of Certification (BOC) certification and appropriate state credentialing.

Professional program: The graduate-level coursework that instructs students on the knowledge, skills, and clinical experiences necessary to become an athletic trainer, spanning a minimum of two academic years.

Professional socialization: Process by which an individual acquires the attitudes, values and ethics, norms, skills, and knowledge of a subculture of a health care profession.¹⁰

Program graduation rate: Measures the progress of students who began their studies as full-time degree-seeking students by showing the percentage of these students who complete their degree within 150% of "normal time" for completing the program in which they are enrolled. Programs must post the following data for the past three years on their website: the number of students admitted to the program, the number of students who graduated, and the percentage of students who graduated.

Program personnel: All faculty (core, affiliated, and adjunct) and support staff involved with the professional program.

Program retention rate: Measures the percentage of students who have enrolled in the professional program who return to the institution to continue their studies in the program the following academic year. Programs must post the following data for the past three years on their website: the number of students who enrolled in the program, the number of students returning for each subsequent academic year, and the percentage of students returning for each subsequent academic year.

Quality assurance: Systematic process of assessment to ensure that a service is meeting a desired level.

Quality improvement: Systematic and continuous actions that result in measurable improvement in health care services and in the health status of targeted patient groups. ¹¹ Quality improvement includes identifying errors and

hazards in care; understanding and implementing basic safety design principles such as standardization and simplification; continually understanding and measuring quality of care in terms of structure, process, and outcomes in relation to patient and community needs; and designing and testing interventions to change processes and systems of care, with the objective of improving quality.¹²

Scholarship: Scholarly contributions that are broadly defined in four categories. 13

- Scholarship of discovery contributes to the development or creation of new knowledge.
- Scholarship of integration contributes to the critical analysis and review of knowledge within disciplines or the creative synthesis of insights contained in different disciplines or fields of study.
- *Scholarship of application/practice* applies findings generated through the scholarship of integration or discovery to solve real problems in the professions, industry, government, and the community.
- Scholarship of teaching contributes to the development of critically reflective knowledge associated with teaching and learning.

Simulation: An educational technique, not a technology, to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner. ¹⁴ See also Clinical education.

Social determinants of health: The conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels.¹⁵

Socioeconomic status: The social standing or class of an individual or group, frequently measured in terms of education, income, and occupation. Socioeconomic status has been linked to inequities in access to resources, and it affects psychological and physical health, education, and family well-being.¹⁶

Supervision: Supervision occurs along a developmental continuum that allows a student to move from interdependence to independence based on the student's knowledge and skills as well as the context of care.

Preceptors must be on-site and have the ability to intervene on behalf of the athletic training student and the patient. Supervision also must occur in compliance with the state practice act of the state in which the student is engaging in client/patient care.

Supplemental clinical experiences: Learning opportunities supervised by health care providers other than athletic trainers or physicians. *See also* Clinical education.

Technical standards: The physical and mental skills and abilities of a student needed to fulfill the academic and clinical requirements of the program. The standards promote compliance with the Americans with Disabilities Act (ADA) and must be reviewed by institutional legal counsel.

Value-based care models: Health care delivery system focused on the value of care delivered rather than on a feefor-services approach.¹⁷

References

- BOC Standards of Professional Practice. Board of Certification website.
 www.bocatc.org/system/document_versions/versions/69/original/boc-standards-of-professional-practice-2018-20171113.pdf?1510606441. Published October 2017. Accessed February 1, 2018.
- 2. Program Operations Manual System. Social Security Administration website. https://secure.ssa.gov/poms.nsf/lnx/0600610200. Updated May 23, 2014. Accessed February 1, 2018.
- 3. Sackett D, Rosenberg W, Gray J, Haynes R, Richardson W. Evidence based medicine: What it is and what it isn't. *BMJ*. 1996;312(7023):71-72.
- 4. Health informatics defined. National Library of Medicine website. www.himss.org/health-informatics-defined. Published January 7, 2014. Accessed February 1, 2018.
- 5. U.S. Department of Health and Human Services. *Healthy People 2010*. Washington, DC: U.S. Government Printing Office; 2000.
- 6. World Health Organization. *International Classification of Functioning, Disability, and Health.* Geneva: WHO; 2001.
- 7. Interprofessional Education Collaborative. *Core Competencies for Interprofessional Collaborative Practice: 2016 Update.* Washington, DC: IPEC; 2016.
- 8. Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century.* Washington, DC: National Academies Press; 2011. doi:10.17226/10027
- 9. Commission on Accreditation of Athletic Training Education. *Standards for the Accreditation of Post-Professional Athletic Training Degree Programs.* Austin, TX: CAATE; 2013.
- 10. Breitbach AP, Richardson R, National Athletic Trainers' Association Executive Committee for Education, Interprofessional Education and Practice in Athletic Training Work Group. Interprofessional education and practice in athletic training. *Athletic Training Education Journal*. 2015;10(2):170-182.
- 11. Quality improvements. U.S. Department of Health and Human Services website. www.hrsa.gov/sites/default/files/quality/toolbox/508pdfs/qualityimprovement.pdf. Published April 2011. Accessed February 15, 2018.
- 12. Institute of Medicine. *Health Professions Education: A Bridge to Quality.* Washington, DC: National Academies Press; 2003. doi:10.17226/10681
- 13. Boyer EL. Scholarship Reconsidered: Priorities of the Professoriate. San Francisco, CA: Jossey-Bass; 1991.
- 14. Gaba DM. The future vision of simulation in health care. Qual Saf Health Care. 2004;13(suppl 1):i2-i10.
- 15. Social determinants of health. World Health Organization website. www.who.int/social_determinants/en. Accessed February 1, 2018.
- 16. Fact sheet on ethnic and racial minorities and socioeconomic status. American Psychological Association website. www.apa.org/pi/ses/resources/publications/minorities.aspx. Accessed February 1, 2018.
- 17. Porter ME. What is value in health care? N Engl J Med. 2010;363:2477-2481. doi:10.1056/NEJMp1011024