

Do Athletic Trainers (ATs) have the education to manage concussions? Do ATs possess the knowledge and skills to determine an athlete's ability to return to play?

The short answer is YES! According to the National Athletic Trainers' Association (NATA), as of November 14, 2017, all 50 states have concussion laws. Thirty-five states directly or indirectly recognize ATs to make return-to-play decisions.

The analysis outlined below is referenced from the BOC's *Practice Analysis, 7th Edition (PA)* and the CAATE's *Athletic Training Education Competencies, 5th Edition (Competencies)*. The *PA* serves as the validated basis of knowledge and skills for an entry-level athletic trainer (AT) and the blueprint for the exam. The *Competencies* define the educational content that is expected of students within an accredited athletic training program. Although these are two distinctly individual documents, both hold a major role in the preparation and evaluation of entry-level ATs.

PA

DOMAIN II: Examination, Assessment and Diagnosis

Task 1: Obtain an individual's history through observation, interview and review of relevant records to assess injuries and illnesses and to identify comorbidities.

Task 2: Perform a physical examination that includes diagnostic testing to formulate differential diagnoses.

Task 3: Formulate a clinical diagnosis by interpreting history and the physical examination to determine the appropriate course of action.

Task 4: Interpret signs and symptoms of injuries, illnesses or other conditions that require referral, utilizing medical history and physical examination to ensure appropriate care.

Knowledge of/Skill in:

- Assessing neurocognitive function
- Assessing neurological response
- Clinical trajectories of concussions
- Guidelines for return to participation
- Interpreting results of special tests
- Mechanics, principles and techniques of special and specific tests (e.g., ROM, MMT, orthopedic, neurocognitive, neurological)
- Neuroscience

DOMAIN IV: Therapeutic Intervention

Task 3: Administer therapeutic exercises to patients using appropriate techniques and procedures to aid recovery to optimal function

Task 6: Administer therapeutic interventions for general medical conditions to aid recovery to optimal function

Task 7: Determine patients' functional status using appropriate techniques and standards to return to optimal activity level

Knowledge of/Skill in:

- Advocating for cognitive and functional return to optimal activity level decisions
- Assessing and reassessing therapeutic interventions
- Basing interpretation and rehabilitation on cognitive assessments
- Examining and re-examining injuries and illnesses
- Functional criteria for return to optimum activity level
- Making decisions about functional progressions
- Making decisions about return to optimal activity level
- Neurological concerns related to general medical conditions
- Neurological concerns related to therapeutic exercise
- Performing cognitive assessments
- Traumatic brain injury concerns related to general medical conditions

Education Competencies

Clinical Examination and Diagnosis (CE)

- **CE-19.** Determine criteria and make decisions regarding return to activity and/or sports participation based on the patient's current status.
- **CE-20.** Use standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses and diseases including, but not limited to:
 - **CE-20f.** Neurological assessments (sensory, motor, reflexes, balance, cognitive function)
- **CE-21.** Assess and interpret findings from a physical examination that is based on the patient's clinical presentation. This exam can include:
 - **CE-21h.** Neurologic function (sensory, motor, reflexes, balance, cognition)

Acute Care of Injuries and Illnesses (AC)

- **AC-34.** Explain the importance of monitoring a patient following a head injury, including the role of obtaining clearance from a physician before further patient participation.
- **AC-36.** Identify the signs, symptoms, interventions and, when appropriate, the return-to-participation criteria for:
 - **AC-36b.** Brain injury including concussion, subdural and epidural hematomas, second impact syndrome and skull fracture

Therapeutic Interventions (TI)

- **TI-7.** Identify patient- and clinician-oriented outcomes and measures commonly used to recommend activity level, make return-to-play decisions and maximize patient outcomes and progress in the treatment plan.

Clinical Integration Proficiencies (CIP)

- **CIP-4.** Perform a comprehensive clinical examination of a patient with an upper extremity, lower extremity, head, neck, thorax and/or spine injury or condition. This exam should incorporate clinical reasoning in the selection of assessment procedures and interpretation of findings in order to formulate a differential diagnosis and/or diagnosis, determine underlying impairments and identify activity limitations and participation restrictions. Based on the assessment data and consideration of the patient's goals, provide the appropriate initial care and establish overall treatment goals. Create and implement a therapeutic intervention that targets these treatment goals to include, as appropriate, therapeutic modalities, medications (with physician involvement as necessary), and rehabilitative techniques and procedures. Integrate and interpret various forms of standardized documentation including both patient-oriented and clinician-oriented outcomes and measures to recommend activity level, make return-to-play decisions, and maximize patient outcomes and progress in the treatment plan.