

# CTE - Sports Medicine and Rehabilitation

## Use Medical Terminology as Applied in healthcare 1.0

- 1.1 Use medical abbreviations and acronyms commonly used in sports medicine and rehabilitation services 1.1
- 1.2 Use anatomical terms commonly used in sports medicine and rehabilitation services (e.g., positions, planes locations, and joint motions) 1.2
- 1.3 Use root words, prefixes, and suffixes commonly used in sports medicine and rehabilitation services 1.3

## Demonstrate an Understanding of Body Systems and Human Anatomy 2.0

- 2.1 Examine the structure and function of the cardiopulmonary system 2.1
- 2.2 Examine the structure and function of the musculoskeletal system (e.g., axial and upper and lower extremities) 2.2
- 2.3 Analyze the joints and their articular structures (i.e., joint types, synovial joint characteristics, etc.) 2.3
- 2.4 Examine the structure and function of the neurological system 2.4

## Examine Health and Performance Concepts 3.0

- 3.1 Describe nutritional concepts and physical composition of food (e.g., 6 basic nutrients, protein, carbohydrates, fats, vitamin, minerals, and water) 3.1
- 3.2 Calculate and analyze caloric intake in relation to dietary guidelines (e.g., RDA for protein, carbohydrates, and fat) 3.2
- 3.3 Explain nutrition and exercise considerations for diverse populations (i.e., patients with medical conditions, cultural considerations, food intolerances, weight management, etc.) 3.3
- 3.4 Describe general concepts of athletic hydration (e.g., pre-practice/competition, competition, and post-practice/competition) 3.4
- 3.5 Interpret tests used to determine fitness for cardiorespiratory endurance, strength, flexibility, and body composition 3.5
- 3.6 Evaluate dietary supplements and performance enhancement drugs (PEDs) for safety and efficacy 3.6

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|                                                                     | <b>3.7 Explain general strength and conditioning training principles and how they apply to fitness regimens</b> 3.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Demonstrate Safety and Infection Control</b> 4.0                 | <b>4.1 Describe maintaining a safe and sanitary treatment area including the use of disinfectants, antiseptics, and sanitization techniques</b> 4.1<br><b>4.2 Use universal precautions (e.g., use and disposal of PPE equipment and biohazard materials)</b> 4.2<br><b>4.3 Apply strategies of risk management according to OSHA compliance, SDS chemical management, and injury and illness compliance solutions</b> 4.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Manage Acute Care Emergency and Non-Emergency Situations</b> 5.0 | <b>5.1 Assess vital signs (normal vs. abnormal) (i.e., temperature, pulse, respirations, skin, pupils, blood pressure, pulse oximetry, etc.)</b> 5.1<br><b>5.2 Recognize sudden illnesses and describe their treatment (e.g., fainting, seizures, types of shock, poisoning, heart attack, stroke, and choking)</b> 5.2<br><b>5.3 Recognize causes, signs, symptoms, and describe treatment of environmentally related emergencies (e.g., effects of heat and cold, and asthma)</b> 5.3<br><b>5.4 Perform CPR (cardiopulmonary resuscitation) and AED (automated external defibrillator) procedures for infants, children, and adults</b> 5.4<br><b>5.5 Demonstrate common taping, wrapping, and bracing techniques that prevent, support, or treat injuries and conditions</b> 5.5<br><b>5.6 Describe common open and closed wounds including bleeding control techniques (e.g., abrasions, incisions, lacerations, punctures, blisters, and contusions)</b> 5.6<br><b>5.7 Demonstrate proper wound care to assess and prevent infection (e.g., signs and symptoms of infection, cleaning, bandaging, and dressing)</b> 5.7<br><b>5.8 Demonstrate splinting techniques (e.g., soft, rigid, and anatomical)</b> 5.8<br><b>5.9 Explain proper procedures for removing and transporting an injured patient including the use of proper body mechanics (e.g., logroll, spine board, and stretcher)</b> 5.9<br><b>5.10 Describe key components of emergency action plans and conditions for activation</b> 5.10<br><b>5.11 Differentiate between the appropriate first aid supplies for various types of allied health care settings</b> 5.11 |
| <b>Assess the Impact of Injuries, Sport Trauma, and Physical</b>    | <b>6.1 Use information from H.I.P.S., H.O.P.S., or SOAP for an injury evaluation</b> 6.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## **Dysfunction and Disorders** 6.0

**6.2 Understand the etiology, signs, and symptoms related to injuries to the head** 6.2

**6.3 Understand the etiology, signs, and symptoms related to injuries to axial regions** 6.3

**6.4 Understand the etiology, signs, and symptoms related to injuries to upper body extremity** 6.4

**6.5 Understand the etiology, signs, and symptoms related to injuries to lower body extremity** 6.5

**6.6 Identify and describe common special tests used to evaluate joints (e.g., ligament, valgus and varus, anterior and posterior drawer, and apprehension)** 6.6

**6.7 Identify phases of tissues' healing injury** 6.7

**6.8 Investigate the cause of secondary injuries (i.e., gait, compensatory posture, etc.)** 6.8

## **Apply Therapeutic Exercise, Training, and Reconditioning** 7.0

**7.1 Differentiate among various kinds of exercises (i.e., isometric, isotonic, manual resistance, isokinetic, circuit training, etc.)** 7.1

**7.2 Consider indications, contraindications, and safety precautions in strength and conditioning activities** 7.2

**7.3 Describe types of stretching and flexibility strategies (i.e., static, ballistic, dynamic, proprioceptive neuromuscular facilitation, etc.)** 7.3

**7.4 Explain strength, mobility, and balance as related to performance and injury prevention** 7.4

**7.5 Explain indications, contraindications, precautions, and proper fitting of devices for mobility, transfers and ambulation (e.g., weight-bearing assistive devices, prosthetics, orthotic devices, and protective equipment)** 7.5

**7.6 Determine appropriate rehabilitation progression [e.g., return- to-play, -work, and -daily activity criteria (full strength, free from pain, skill performance tests, and emotional readiness)]** 7.6

## **Demonstrate an Understanding of Therapeutic Interventions and Pain Management** 8.0

**8.1 Explain treatment expectations, physiological changes, and special instructions for specific interventions (i.e., thermotherapy, cryotherapy, electric stimulation, ultrasound, hydrotherapy, compression, etc.)** 8.1

**8.2 Explain indications, contraindications, safety precautions, and applications related to interventions (i.e., thermotherapy, cryotherapy, electric stimulation, ultrasound, hydrotherapy, compression, etc.)** 8.2

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**8.3** Recognize traditional and nontraditional approaches to pain management (i.e., pharmaceutical and complementary techniques, etc.) 8.3

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**8.4** Demonstrate the proper use of PRICE (protection, rest, ice, compression, and elevation) 8.4

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**Apply Psychological Techniques to Physical Performance, Injury Evaluation, and Rehabilitation** 9.0

**9.1** Describe emotional/psychological responses to injury and rehabilitation (i.e., depression, anxiety, fear, etc.) 9.1

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**9.2** Explain motivational techniques for physical conditioning and rehabilitation (i.e., goal setting, positive reinforcement, celebrating successes, etc.) 9.2

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**9.3** Identify risk factors, signs, and symptoms for patients in need of interventional counseling (i.e., eating disorders, depression, head injury, substance abuse, etc.) 9.3

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**Demonstrate Healthcare Organizations and Administration Activities** 10.0

**10.1** Document the results of observations and treatments [e.g., EMR (electronic medical record); SOAP (subjective, objective, assessment, and plan); HOPS (History, Observation, Palpation, Special Tests); HIPS (History, Inspection, Palpation, Special Tests) and daily treatment records] 10.1

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**10.2** Describe the basic terminology of health insurance (e.g., co-pay, third-party payment, reimbursement, Explanation of Benefits (EOB), visit authorizations, referrals, and PPO/HMO) 10.2

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**10.3** Understand the process of maintenance and inventory of supplies and equipment 10.3

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**10.4** Utilize professional resources to stay current with advances in healthcare (i.e., CDC, professional journals, position statements, etc.) 10.4

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**10.5** Assess the benefits of active involvement in local, state, and national associations and organizations 10.5

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**10.6** Evaluate methods to protect patients' rights through legal, moral, and ethical measures (e.g., HIPAA legal liability, codes of ethics, and standards of care) 10.6