# Nonsurgical Pain Management (NSPM) Content Outline and Exam Blueprint Effective 2021

### Domain I: Anatomy, Physiology and Pathophysiology of Pain - 19%

- I.A. Applicable anatomy and physiology of pain
- I.B. Nociception: transduction, transmission, perception and modulation of pain
- I.C. Factors influencing pain
  - I.C.1. Psychological
  - I.C.2. Epigenetic
  - I.C.3. Cultural difference
  - I.C.4. Comorbid
  - I.C.5. Epidemiologic
  - I.C.6. Other
- I.D. Cellular response to pain and treatment
- I.E. Pain classifications (e.g. nociplastic, neuropathic, nociceptic)
- I.F. Anatomical Pain Pathways
- I.G. Pathophysiology of
  - I.G.1. Neurotransmitters
  - I.G.2. Inflammatory mediators
  - I.G.3. Pain syndromes

## Domain II: Safety and Equipment - 11%

- II.A. Radiation safety
  - 2.A.i. Patient
  - 2.A.ii. Provider and staff
  - 2.A.iii. Health effects
- II.B. Radiation terminology
- II.C. Ultrasound terminology
- II.D. Physics and principles
  - II.D.1. Fluoroscopy equipment
  - II.D.2. Ultrasound equipment
  - II.D.3. Neuroablation equipment
  - II.D.4. Other equipment (e.g., CT, nerve stimulator, MRI, EMG, nerve conduction)
- II.E. Patient safety
  - II.E.1. Positioning
  - II.E.2. Equipment
  - II.E.3. Infection control

# Domain III: Assessment, Diagnosis and Plan of Care - 24%

- III.A. Screening tools for health history
- III.B. Physical examination
- III.C. Pain generators
- III.D. Use and interpretation for diagnostic evaluation
  - III.D.1. MRI

- III.D.2. CT
- III.D.3. EMG/NCV
- III.D.4. X-rav
- III.D.5. Ultrasound
- III.D.6. Laboratory tests
- III.D.7. Other diagnostic studies (e.g., discogram, bone scan, PET scan, genetic testing)
- III.E. Plan of care evaluation and management
- III.F. Plan of care treatment goals
- III.G. Clinical judgment
  - III.G.1. Red flag symptoms risk assessment and identification
  - III.G.2. Co-existing conditions/comorbidities risk assessment and identification
  - III.G.3. Substance use disorder risk assessment and identification
  - III.G.4. Differential diagnosis
  - III.G.5. Interventions
  - III.G.6. Interprofessional collaboration, consultation and referral (e.g., nutritional, physical and/or occupational therapy, psychological, surgical)
- III.H. Complementary and integrative management for behavioral therapies
- III.I. Other complementary and integrative management (e.g., acupuncture, exercise, mindfulness, stress reduction)
- III.J. Patient education

#### Domain IV: Pharmacology - 19%

- IV.A. NSAIDS/antipyretic analgesics
- IV.B. Opioids (agonists, antagonists, mixed)
- IV.C. Anticonvulsants
- IV.D. Antidepressants
- IV.E. Muscle relaxants
- IV.F. GABA analogs
- IV.G. Local anesthetics
- IV.H. Corticosteroids
- IV.I. Contrast medium
- IV.J. NMDA receptor antagonists
- IV.K. Cannabinoids
- IV.L. Opioid-Induced Constipation (OIC) treatments
- IV.M. Other medications (e.g., bisphosphonates, topical medications, alpha-2 agonist, botulinum toxin)
- IV.N. Supplements
- IV.O. Drug interactions
- IV.P. Adverse effects
- IV.Q. Contraindications
- IV.R. Misuse and abuse
- IV.S. Opioid epidemic:
  - IV.S.1. Prescribing guidelines
  - IV.S.2. Patient education
  - IV.S.3. Treatment and resources for substance use disorder
  - IV.S.4. Controlled substance contracts
  - IV.S.5. Prescription drug monitoring program
- IV.T. Safe drug practices

#### **Domain V: Interventional Pain Strategies - 20%**

- V.A. Plan of care implementation
- V.B. Neuraxial principles and techniques:
  - V.B.1. Anatomical considerations
  - V.B.2. Needle placement with ultrasound
  - V.B.3. Needle placement with fluoroscopy
- V.C. Peripheral principles and techniques:
  - 5.C.1. Anatomical considerations
  - 5.C.2. Needle placement with ultrasound
  - 5.C.3. Needle placement with fluoroscopy
- V.D. Neuroablative principles and techniques:
  - 5.D.1. Anatomical considerations
  - 5.D.2. Needle placement with ultrasound
  - 5.D.3. Needle placement with fluoroscopy
- V.E. Regenerative Treatment Principles
- V.F. Neuromodulation Principles
- V.G. Prevention of interventional complications
- V.H. Identification of interventional complications
- V.I. Management of interventional complications
- V.J. Palliative and end-of-life management

## Domain VI Professional Aspects - 7%

- VI.A. Informed Consent
- VI.B. Protection of patient rights
- VI.C. Outcome measurements
- VI.D. Patient follow-up
- VI.E. Legal, statutory, regulatory and ethical issues