H: Orthopedics
A Licensed Practical Nurse will:

**H-1-1** Demonstrate knowledge and ability to apply critical thinking and critical inquiry throughout the nursing process in orthopedics.

**H-1-2** Demonstrate knowledge of anatomy, physiology and pathophysiology related to the musculoskeletal system including:
- determinants of normal musculoskeletal structure and function
- identify symptoms indicating immediate/urgent need for intervention
- infection prevention, risks, exposure and management
- musculoskeletal illness and trauma
- signs and symptoms of musculoskeletal impairment

**H-1-3** Demonstrate knowledge and ability to provide evidence informed, client centered care in relation to orthopedic nursing.

**H-1-4** Demonstrate knowledge and ability to provide health teaching and coaching associated with orthopedic nursing.

**H-1-5** Demonstrate knowledge and ability to communicate and collaborate with inter-professional team.
A Licensed Practical Nurse will:

**H-2-1** Demonstrate knowledge and ability to assess and manage nursing care for conditions and injuries of the musculoskeletal system.

**H-2-2** Demonstrate knowledge and ability to apply principles of pharmacokinetics and pharmacodynamics specific to medication management of orthopedic client.

**H-2-3** Demonstrate knowledge of orthopedic diagnostic tests and nursing implications including:
- arthrogram
- blood tests
- bone scan
- computed axial tomography (CT scan)
- discography
- doppler studies
- electromyography (EMG) (nerve conduction studies)
- magnetic resonance imaging (MRI)
- myelogram
- X-ray

**H-2-4** Demonstrate knowledge and ability to assess and manage ambulation and immobilization needs including:
- braces and splints
- canes, crutches, walkers, wheelchairs
- external fixators
- mechanical lifts
- nutritional needs
- pain management
- physical mobility and ambulation
- protective devices
- traction
A Licensed Practical Nurse will:

**H-3-1**  
Demonstrate knowledge of indications and contraindications associated with use of traction and immobilizers.

**H-3-2**  
Demonstrate knowledge and ability to assess and manage client with traction and immobilization devices including:
- ambulation
- complications (compartment syndrome, compression syndrome, infection, bleeding, etc.)
- edema
- neurovascular status
- pain

**H-3-3**  
Demonstrate knowledge and ability to manage cast care including:
- bivalving
- removing
- trimming
- univalving
- windowing

**H-3-4**  
Demonstrate knowledge and ability to fit and apply pre-formed removable splints and braces including:
- adjustable knee braces (Zimmer splints)
- clam shells
- half/back slabs
- soft cervical collars

**H-3-5**  
Demonstrate knowledge and ability to cut, form and apply removable resting splint or immobilizer.
A Licensed Practical Nurse will:

**H-3-6** Demonstrate knowledge and ability to manage nursing care for client with traction/external fixators including:
- bucks
- halo
- manual
- pin site care
- skeletal
- skin

**H-3-7** Demonstrate knowledge of indications and contraindications associated with care of c-spine injuries.