H: Orthopedic Nursing
Major Competency Area: H
Orthopedic Nursing

Priority: One

Competency: H-1
Knowledge of Orthopedic Nursing

Date: September 1, 2005

A Licensed Practical Nurse will:

**H-1-1** Demonstrate knowledge of human anatomy and physiology, specifically the musculoskeletal, nervous, and cardiovascular systems.

**H-1-2** Demonstrate knowledge of common musculoskeletal disorders:
- arthritis
- degenerative disorders
- dislocations
- fractures
- osteomyelitis
- osteoporosis
- compartment syndrome
- soft tissue injuries / multiple system injuries / trauma.

**H-1-3** Demonstrate ability to assess the musculoskeletal system and to differentiate normal and abnormal findings.

**H-1-4** Demonstrate ability to provide nursing interventions to meet needs of client with common musculoskeletal disorders:
- physical mobility and ambulation
- pain management
- nutritional needs
- protective devices.

**H-1-5** Demonstrate ability to teach client and family regarding use of ambulatory and immobilization aids such as:
- canes
- crutch walking
- mechanical lifts
- use of braces and splints
- wheelchairs / walkers.
H-2-1 Demonstrate knowledge of the pathophysiology of fractures, manifestations, and medical management.

H-2-2 Demonstrate knowledge and ability to care for clients with a variety of casts.

H-2-3 Demonstrate ability to assess client with a cast:
- bleeding
- cast drying
- complications i.e., compartment syndrome, compression syndrome, infection
- edema
- external fixators
- neurovascular status
- pain.

H-2-4 Demonstrate ability to cut cast as ordered by physician:
- bivalving
- trimming
- removing
- windowing
- univalving
- follow-up care.

H-2-5 Demonstrate ability to teach client and family regarding cast care and observation for complications.

H-2-6 Demonstrate ability to document and report the assessment, location and type of cast, special procedures, and findings.
A Licensed Practical Nurse will:

**H-2-7** Demonstrate ability to describe common orthopedic diagnostic tests and nursing implications such as:
- arthrogram
- bone scan
- computed axial tomography (CAT or CT scan)
- magnetic resonance imaging (MRI)
- myelogram
- tomogram
- X-ray.

**H-2-8** Demonstrate knowledge and ability to teach client and family about the diagnostic tests, procedures, and follow-up necessary as per agency policy.
Major Competency Area: **H**

**Orthopedic Nursing**

Competency: **H-3**

**Traction and External Fixators**

Priority: **One**

Date: September 1, 2005

A Licensed Practical Nurse will:

**H-3-1** Demonstrate knowledge of the purposes and safe care of the common methods of traction / external fixators such as:
- manual
- skeletal
- skin.

**H-3-2** Demonstrate knowledge and application of the principles of traction.

**H-3-3** Demonstrate the knowledge and ability to apply a variety of traction using proper equipment and techniques.

**H-3-4** Demonstrate ability to assess the client in traction / external fixators and provide appropriate care and nursing interventions.

**H-3-5** Demonstrate ability to teach client and family regarding traction / external fixators and safety precautions.
Major Competency Area: H
Orthopedic Nursing

Competency: H-4
Splints and Braces

Priority: One

Date: September 1, 2005

A Licensed Practical Nurse will:

H-4-1 Demonstrate knowledge and ability to use the common types of splints and braces.

H-4-2 Demonstrate ability to assess client in splint or brace and provide appropriate nursing care and interventions:
  • altered physiological needs
  • comfort measures
  • neurovascular status
  • noncompliance
  • pain
  • presence of contracture
  • range of motion and exercises
  • skin integrity.

H-4-3 Demonstrate ability to teach client and family regarding the care, application, and complications of splints and braces.