

**CONSIDERATIONS:**

1. The purpose of weight bearing/balance exercise is to assist the patient to gain balance, correct the center of gravity, stimulate increased bone density, strengthen the lower extremities and improve mobility, weight shifting and functional activity.
2. If the patient is unable to tolerate weight bearing without reproduction of pain/symptoms, the patient should use a supportive device, such as a walker. If an appropriate assistive device is not in the home, the patient needs to be evaluated by a Physical Therapist for an appropriate assistive device.
3. Gradually progress exercises for increased tolerance to exercise. Exercise should be at a level that allows the patient to maintain control at all times.
4. Weight bearing exercises:
  - a. Involve all of the muscles and joints of the lower extremities
  - b. Frequently involve functional daily movements, which can increase tolerance and patient participation
5. The patient should not perform this exercise program independently unless directed by clinician. Caregiver presence and training during program may be needed before patient can perform exercise without the clinician present.

**EQUIPMENT:**

Support device (to maintain balance and safety)  
Functional equipment as appropriate

**PROCEDURE:**

1. Adhere to Standard Precautions.
2. Adhere to plan of care (POC) orders.
3. Monitor patient vital signs prior to and following all exercise.
4. Utilize a gait belt for safety, especially at initiation period of weight bearing exercises.
5. Increase endurance by increasing the amount of time spent on an activity.
6. Examples of control and stability exercise are to have the patient:
  - a. Stand erect and shift weight side-to-side
  - b. Stand on one leg for one minute
  - c. March in place
  - d. Stand and control balance while the clinician gently pushes on the pelvis or upper trunk
7. Examples of closed chain exercises:
  - a. With a resistance band looped behind the knee, the patient stands on one leg and bends and straightens the leg
  - b. Patient performs squats
  - c. Patient performs lunges
  - d. Patient performs push-ups

- e. Steps b and c can be modified to include assistive device such as a walker or support from counter
8. Examples of balance exercises are to have the patient:
  - a. Stand on a balance board or soft surface
  - b. Participate in sport movements such as bowling, skiing or racquet sports. This requires patient imagination in the home setting
  - c. Walk heel-to-toe
  - d. Perform cross-over or grapevine walking
  - e. Follow a four square pattern
9. Examples of aerobic exercises:
  - a. Dancing
  - b. Stair climbing
  - c. Running
  - d. Brisk walking
  - e. Bilateral upper extremity and lower extremity actions, such as sustained marching in place
10. Examples of exercises that simulate functional activity:
  - a. Walking on uneven surfaces
  - b. Maneuvering around obstacles
  - c. Stop and start as well as turns
  - d. Placing objects on a shelf
  - e. Folding laundry while standing
  - f. Retrieving an item and bringing to another site
  - g. Changing walking speeds to slow, normal and fast

**AFTER CARE:**

1. Document in the patient chart:
  - a. Exercises performed, number of repetitions and the patient's tolerance to the activity
  - b. Vital signs at beginning and end of exercises
  - c. Any adverse reactions or unusual pain
  - d. Any communication with physician or team members
2. Teach patient/caregiver to call home health agency if patient has any problems with exacerbating pain or difficulty performing exercise program.
3. Communicate with physician about adverse reactions or unusual pain.
4. Referral to nurse for pain management, if needed.
5. Referral to Physical Therapy for evaluation of potential assistive devices, if needed.