**Falls in Older Adults**

**Rehab post Total Knee Arthroplasty in Older Adults with a Focus on Balance**

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* Falls are common
* 30% of adults older than 65 years old fall at least once per year
* Risk of falling increases 3-fold in people with impaired balance or gait
* Older adults fall after TKA
  + falls rate high as 45%
* People with TKA have an increased risk to trip on an obstacle and fall

**Balance Training**

* Important component of rebab post TKA
* Balance exercises should be included to improve functional outcomes and to reduce falls

**Balance Exercises**

* Walking: backwards, sideways, on a slope, sideways while crossing the legs, changes in direction
* Tandem walk
* Standing on foam
* Feet together, single leg stance, or catches ball
* Braiding activities-alternate front and back crossover steps while moving laterally
* Tilt board activities
* Shuttle walking
* Stepping over cones
* Step-ups

**Functional Exercises**

* Sit to stands
* Bilateral knee flexion/extension in standing or squats
* Ascend and descend a flight of stairs

**Strengthening Exercises**

* Isometric knee extension: with the knee flexed at 0 degrees and 60 degrees
* Isometric hamstring with the knee flexed to 60 degrees
* Straight leg raises
* Concentric and eccentric strengthening of hip abductors
* Unilateral knee flexion close to 90 degrees then extension in standing with upper extremity support
* Leg lifts onto step
* Knee extension in sitting
* Resisted knee flexion

**ROM Exercises**

* Active ROM exercises for the lower extremity: knee flexion exercises, knee extension exercises, alternating dorsal and plantarflexion of the ankle
  + Example: heel slides while in bed
* Physical therapist assisted knee flexion

**Other Interventions**

* Wii Fit games
* Walking program
* Treadmill walking
* Stationary cycling

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