Fall Risk Management

..... Is Everybody's Business

A fall is ...

An unintentional change in position, resulting in an individual coming to rest on the floor or a lower surface

Risk Factors for Falls

- Over age 65
- Female
- Thin
- Poor vision
- Early onset of menopause
- A history of falls
- Diet low in calcium
- Poor balance
- Cognitive Impairment
- Drug/alcohol use
- Seizure Disorder

- Mobility issues
- Diagnosis of osteoporosis
- Presence of a foot disorder
- Low blood pressure
- Low blood sugar
- Lack of exercise
- Prior stroke
- Multiple medications
- Parkinson's or Alzheimer's

Fall Statistics Among Adults with ID

- 50-60% of injuries reported in people with ID are due to falls (Hsieh et al., 2001; Sherrard et al., 2004)
- Injury-related visits to ED and hospital admissions in persons with ID are primarily due to falls (Wang et al., 2002)
- Injury due to falls represents one of the leading causes of liability claims against group homes and other care providers (Tidelksaar, 2007)
- 1.7-3.3 times higher in fractures than the general population and falls are the most common cause (Tannenbaum et al 1989; Lohiya et al. 1999)
- IRIS_Add something about falls from Fractures with osteoporosis

Main Risk Factors of falls

- Internal Risk Factors —> physiological changes
- External Risk Factors -> environmental hazards

Internal Causes of Falls

- Believe they are stronger than they are
- Sensory changes
- Blood pressure or cardiac problems
 - Carotid sinus hypersensitivity
- Medications
- Alcohol/drug use
- Seizure Dirosders

- Chronic disease
- Acute illness
- Cognitive changes
- Dementia
- Decreased muscle strength
- Gait and balance
- Spasticity
- Hyperactivity-impulsiveness

Medications related to increased fall risk

- Polypharmacy
 - Use of multiple meds
- New medication in the last 2 weeks
- Any behavioral drug
 - Major tranquilizers
 - Minor tranquilizer
 - Hypnotic/sedative
 - Any antidepressant

- Corticosteroids, blood pressure or cardiac medication
- NSAIDS
- Anti-cholinergic
- Hypoglycemic
- Iris- check meds research

External Causes of Falls

Environmental Hazards

- Environmental clutter or trip hazards-
 - slippery surfaces; urine on the floor
 - Rugs, steps
- Poor lighting
- Poor fitting footwear
- Side rails
- Restraints
- Weather

Side Rails

- Do not prevent falls
- Cause injury and death due to
 - Climbing over rail and falling
 - Entrapment and strangulation between the rail and mattress

Restraint's cause falls and also cause.....

- Strangulation/injury
- Loss of muscle tone
- Loss of bone mass
- Decreased Mobility
- Pressure Sores

- Agitation
- Stiffness
- Frustration
- Incontinence
- Constipation
- Loss of Dignity

Premature use of wheelchairs

- Avoid using chairs for "safety" to prevent falls
- Premature use of wheelchairs speeds up mobility loss
- Work with Therapists to assess mobility issues
- Don't begin to use a WC without consulting with Therapy

Common Results of Falling

- Most falls do not end in injury or death
- Bruising
- Skin tears and lacerations
- Dislocation of joints
- Fractures

- Fear of falling can impede mobility and socialization
- Head injury
- Death

Falls and Fractures

- Can occur in any part of the skeleton:
 - Wrists, arms, shoulders
 - Legs, ankles and feet
 - Hip fractures
 - 1-2 % of falls will result in hip fractures
 - Spontaneous hip fractures may also result in falls!
 - Ribs and vertebrae
 - Pelvis
 - Skull

Osteoporosis

- Osteoporosis is weakening of bones due to loss of calcium
- 8 million women have osteoporosis
- 2 million men have osteoporosis
- Present in 90% of women > age 65 who fracture
- Present in 80% of men > age 65 who fracture
- Can be diagnosed and treated
 - Exercise, calcium, Vitamin D
- Commonly occurs with long term use of some medication
- IRIS- research and add a new slide common DDW meds

If the shoe fits

- min high-collar (so-called "high-top") shoes are associated with better balance than low-collar shoes.
- The hardness or softness of the sole does not seem to affect balance in older women.

Lord SR, et al. Effects of shoe collar height and sole hardness on balance in older women. J Am Geriatr Soc June 1999;47:681-4.

What can we do to minimize fall risk and keep people safe???



Fall Risk Management Program

Fall Prevention Program

- Assess all residents for fall risk: admit, quarterly& prn
- Develop individualized health care plans
- Use current approaches
 - Equipment
 - Visual Identifiers or symbols to alert all staff of risk
 - Adapt approaches as needed

- Review incident reports daily
- Communicate well
 - File General Events Reporting in Therap
 - Alert all staff in report and on flow sheets
- Educate staff, individuals and families about fall risk
- Monitor the environment
- Track fall rate QA/QI

Fall Prevention Approaches-I

- Assess for illness, infection or constipation
- Assess for cardiac or BP changes
- Review and decrease medications
- Assess vision /hearing. Use glasses/aides.
- PT/OT to assess gait, balance, strength and footwear.

Fall Prevention Approaches-II

- Frequent monitoring for basic needs
- Develop an individualized toileting plan
- Encourage exercise with thera-bands, tai-chi, walking
 - Restorative Activities or Therapy
- Provide good nutrition/hydration and assistance
- Obtain osteoporosis screen; document diagnosis
 - Calcium/vitamin D as ordered

Fall Prevention Approaches-III

- Bed/chair alarms
 - Many can be part of the call system
- Pressure sensitive pads
- Assist rails,½ rails, gait belts
- Raised edge mattress
- Low bed with folding floor pad
- Motion detectors, recorded messages

Fall Prevention Approaches-IV

- Protective Clothing
 - Soft foam helmet
 - Hip protectors, wrist or elbow pads
 - High top shoes
 - Gripper bottom socks for late stage dementia
- Transfer devices
 - Gait belts
 - Lifts
- Address in Committees as needed Iris get with Cheryl

Recommendations

- Assess medications
- Remove clutter from walkways
- No loose rugs
- Use grab bars near toilet and tub
- Non-skid surfaces in the tub or shower
- Educate individuals, families and staff

- Use low beds
- Keep individuals active
- PT, OT and BSC's are resources to work with
- Health checks for vision and changes in condition
- Staff competencies to include fall prevention

RESOURCES

- http://www.webmd.com
- http://www.allrefer.com
- http://www.mayoclinic.com
- http://www.stopfalls.org/what-fallprevention/fp-basics/

Fall Prevention



...you can make a difference in their quality of life.