



Fall Injury Prevention & Rehabilitation Services LLC

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Disclaimer

- The information provided in this presentation is based on best practice interventions from research findings that reveal the most recent evidence for fall prevention and management in community-dwelling elderly. The presenter does not develop or endorse the evidence-based interventions. The information provided is for educational purposes only and may serve as a guide to clinical practice. The presenter assumes no liability for the content of information, or the clinical effectiveness of the best practices interventions and related materials.

OBJECTIVES



- Increase awareness of the growing national public health concern of falls in older adults
- Discuss the screening, assessment, and referral process for fall prevention as identified in the FIPAR Fall Risk Assessment Model
- Apply FIPAR's evidence-based fall prevention services in the clinical, academic, and research communities to prevent injurious falls in the elderly

DEFINITION OF A FALL



“Inadvertently coming to rest on the ground, floor or other lower level, excluding intentional change in position to rest in furniture, wall or other objects”.

World Health Organization, 2007

SIGNIFICANCE



Every 20 minutes an older adult dies as a result of a fall

One out of every three adults ≥ 65 years of age falls each year

Falls are the #1 cause of injury and #6 cause of death in the elderly

Falls account for 80-95% of hip fractures

Financial toll: Expected to reach \$67.7 billion by the year 2020

(National Council on Aging, 2015; CDC, 2014)

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“. . . Recent government reports estimate that fatal falls in the elderly cost the U.S. Medicare program nearly \$1 billion in hospital charges, and those injured with broken bones cost an additional \$19 billion.”

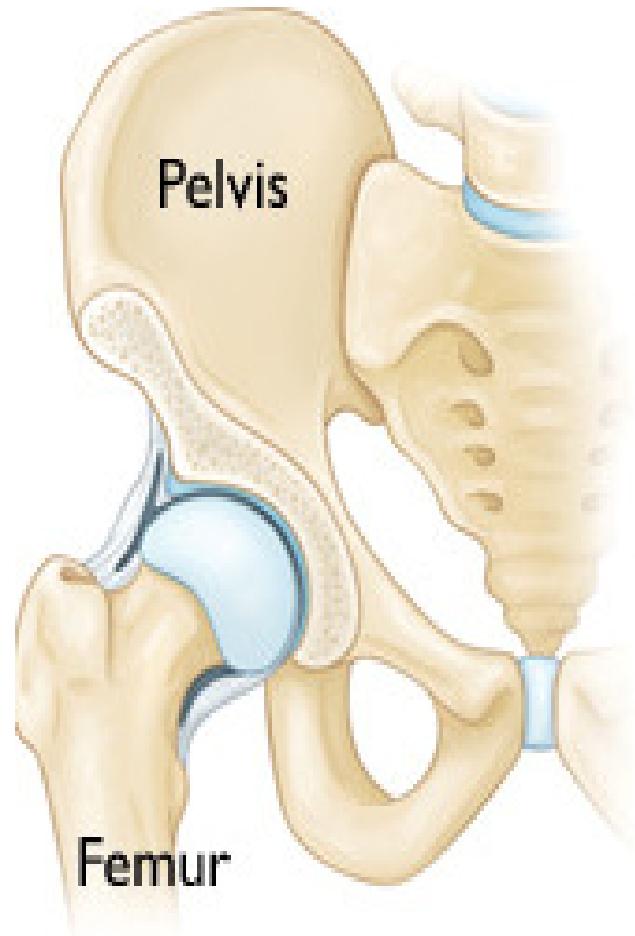
ctures:

hospitalized do not regain their
er level of mobility

% overall reduction in life
cancy

will die within a year

Johns Hopkins Survey, 2009



American Academy Of Orthopaedic Surgeons (AAOS), 2013

FALL INJURY OUTCOMES



- Increased risk of premature death
- Disability
- Reduced social interactions
- Premature nursing home placement



Evidence-based Components

Nursing Home Setting:

- ✓ Morse Fall Scale
- ✓ Tai Chi Exercises
- ✓ Vitamin D Screening and Supplementation
- ✓ Pharmacy Medication Review and Consultation
- ✓ Interdisciplinary Fall Prevention Team

RESULTS



NO SIGNIFICANT CHANGE IN OVERALL FALL RATES

Why Target Community-Dwelling Elderly?



- Fact: Sixty percent of falls among older adults occur in the home environment
- Goals:
 - Prevent injurious falls among community-dwelling elderly
 - Maintain safety in the home
 - Avoid disability, premature nursing home placement, and even subsequent death

FALL INJURY PREVENTION AND REHAB CENTER



- **VISION:** To promote an injurious falls-free community for older Americans through clinical practice, administration, education, and research
- **MISSION:** To improve the safety of older Americans and the efficiency of community-based fall prevention services for the elderly
- **GOALS:**
 - Decrease injurious falls and overall falls
 - 12-month no fall outcome



Interdisciplinary Fall Team Members

- Certified Registered Nurse Practitioner
- Collaborative Physician
- Certified Tai Chi Instructor
- Occupational Therapist
- Community Social Worker
- Audiologist



Why Perform Vestibular Testing?

- 1/3 of American adults or 69 million men and women over age 40 are 12x more likely to have a serious fall due to vestibular dysfunctions
- 1/3 of this group or more than 22 million have vestibular dysfunctions but have not been identified as a fall risk due to no prior incidents of disequilibrium or sudden onset of falls
- These asymptomatic people were 6 times more likely to suffer a fall that was potentially fatal as compared to individuals with healthy balance

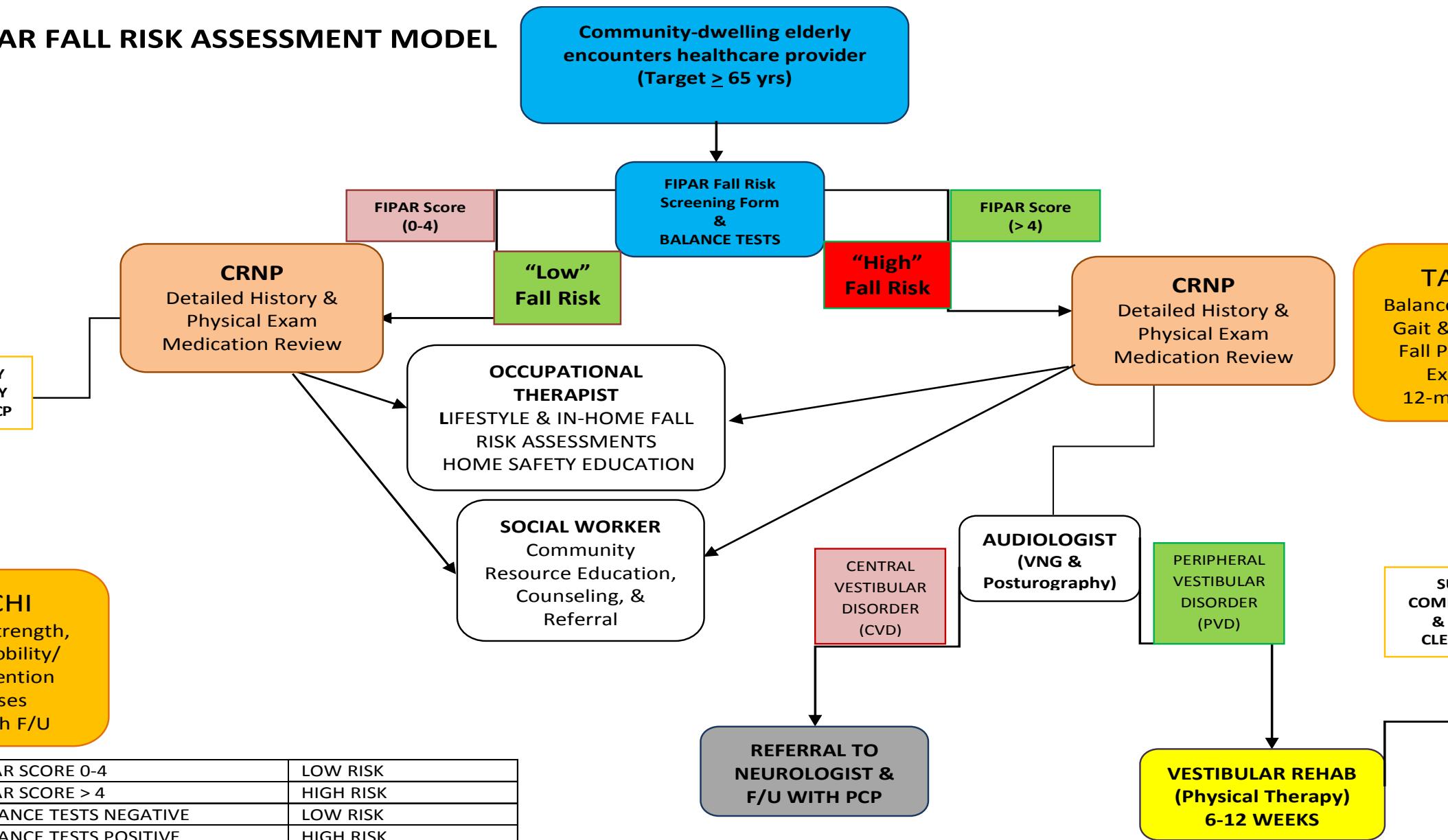
Johns Hopkins Survey, *Archives of Internal Medicine*, 2009

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“Vestibular imbalances need to be taken seriously because falls can be fatal and injuries can be painful, lead to long hospital stays and result in significant loss in quality of life.”

EAR FALL RISK ASSESSMENT MODEL



FIPAR Fall Risk Screening Form

Name (Please print) _____ DOB _____ Age _____ MR# _____

Directions: Please fill out this form and give to the receptionist. Your answers will be discussed with you to determine your risk for a fall or recurrent falls. Place a checkmark in the box to indicate a "Yes" response. **Note:** ≤ 4 major risk factors (*) indicate low risk, > 4 indicate high risk.

General Information:

- Age over 65 years*
- Three or more chronic health conditions (such as high blood pressure, diabetes, heart disease, lung disease, arthritis, stroke, Parkinson's, Osteoporosis, Alzheimer's)*
- Use of an assistive aid (such as eyeglasses, hearing aid)*
- Use of an assistive device (such as a cane, walker, crutches, wheelchair)*
- Use of a prosthesis (such as an eye, arm, or leg prosthesis)
- Smoker or past history of smoking (____ PPD X ____ years)
- Alcohol intake of more than one drink per day (such as beer or wine)
- History of a fall within the past 6 months (location and number of falls)* _____
- History of an injury due to a fall (type of injury)* _____
- Recent hospitalization past 12 months due to a fall*
- Recent surgery past 12 months due to a fall (such as surgery for hip fracture)*

Medications:

- Take 4 or more medications daily (blood pressure, sugar pill, sleeping pill, water pill)*
- Recent changes to your medications (drug, dose, frequency that have caused dizziness)*

Activity Level:

- Exercise less than twice a week*
- Feel unsteady and have difficulty walking, standing, or loss of balance (pain, stiffness)*
- Feel dizzy when turning your head or moving about and walking*
- History of muscle weakness or decreased muscle strength of legs*

Psychosocial and lifestyle Issues:

- Feelings of sadness, hopelessness, helplessness*
- Feelings of wanting to be left alone or social isolation from family and/or friends
- Feelings of anxiety, panic-attacks, excessive worrying*
- Fearful of falling upon walking or making a change in position*

Environmental Surroundings:

- Home safety hazards (throw rugs, lack of non-skid slippers, ill-fitting clothing, furniture in pathway, objects on floor, extension cords across floor, loose carpet, poor lighting)*
- Have trouble getting in and out of bed, chair, tub or toilet*
- Feel unsafe in the home environment*

Fall Injury Prevention & Rehabilitation Center

- FIPAR Center Opened June 2015
- Office hours: Monday thru Friday 9am - 5pm
- Evidence-based, Multi-factorial Program
- Centralized location for a community ambulatory health care center
- Located in a suburban area near senior residences, assisted living facilities, and nursing homes
- “One-stop” community center for fall prevention education, medical diagnostic testing and comprehensive Tai Chi Program



Individualized Goal Setting *is* Realistic



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Research Priorities



- Seek Funding Opportunities
- Engage in future research
- Support on-going community fall prevention initiatives

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