



My Background

- Graduated Doctorate in Physical Therapy (DPT) from Bradley University in 2016
- * Residency with Evidence in Motion (EIM) completed 2017-2019 to earn Board Certification in Orthopedics (OCS) in 2019
- * Managed multiple outpatient orthopedic physical therapy clinics in
 - the south suburbs 2018-2021
- * Opened Fyzical Therapy and Balance Centers fall of 2021
- Locally owned and operated





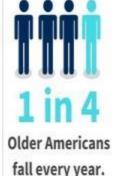
Balance Basics and Fall Prevention



Falls and trip hazards

- Falls are the leading cause of fatal and non-fatal injuries and hospitalizations among older adults
- In America, an older adult falls on average every second
- Falls most often occur from ground level
- * Simple preventative measures can reduce a large amount of time and suffering in the future









falls results in head injury or broken bones. 2x

Older adults who have fallen have twice the chance of falling again.



\$744 million

Total amount spent for acute care hospital charges associated with older adult falls in 2014.



What Do the Statistics Say?

"Falls are the leading cause of fatal and non-fatal injuries for older Americans. Falls threaten a senior's safety and independence, and generate enormous economic and personal costs."

- Falls among adults 65 and older caused over 34,000 deaths in 2019, making it the leading cause of injury death for that age group
- -In 2019, emergency departments recorded 3 millions falls from older adults



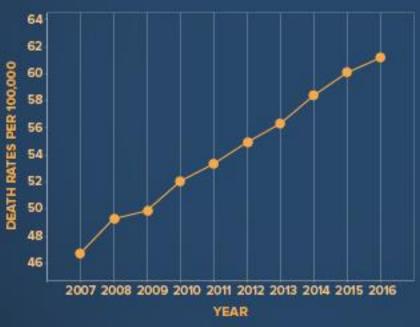
Increasing Burden on Medicare

- In 2005 the cost from falls for adults 65 years of age and older totaled \$350 Million
- In 2013, the direct medical cost of fatal and non-fatal fall injuries totaled over \$34 Billion
- In 2020, the total cost was over \$67.7 Billion!



Fall Death Rates in the U.S. INCREASED 30%

FROM 2007 TO 2016 FOR OLDER ADULTS



Learn more at www.cdc.gov/HomeandRecreationalSafety.

If rates continue to rise, we can anticipate

7 FALL DEATHS

BY 2030





Why Is This Relevant?

- 1 out of 5 falls results in a serious injury such as broken bones or a head injury
 - Every 19 minutes, a senior dies due to an unintentional fall
 - Fear of falling
 - Sedentary behavior
 - Impaired function
 - Lower quality of life





What Can WE Do?

Falls are **NOT** an inevitable result of aging!

The number of falls among seniors can be reduced by:

- Evidence-based interventions
- Practical lifestyle adjustments
- Clinic community partnerships





Simple Steps to Prepare

- Fall alert devices
 - Life alert: \$50-\$90/month
 - Medical Guardian: \$30-\$45/month
 - Apple Watch 4 or later or Apple
 Watch SE: \$100-\$600 one time cost
 - Echo Dot (Alexa): \$20 one time cost







PREVENTION is KEY!





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"Use it or Lose it"

 Our balance gets worse as we age, mainly because we quit challenging it

QUESTION we are commonly asked:

"Am I too old to have good balance?"

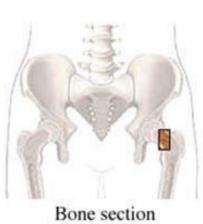
NO! The balance system is like a muscle, you can train it and improve your stability and endurance



Helpful Hints

Bone Density

- This should be checked approximately every 5 years
- If osteoporosis is prevalent, have this checked more frequently



through hip

bone matrix

Solid

Weakened bone matrix











- Clear walkways inside and outside of the home of any clutter, extension cords, and other obstacles that could cause tripping
- Stay active and maintain strength and balance with exercise and physical activity to reduce risk of falling

Where do most falls occur at home?

The **BATHROOM!**







How can we DECREASE the risk?



FYZICAL®
Therapy & Balance Centers

- 1. Grab bars
- 2. Non-slip tub surface
- 3. Sitting in tub instead of standing
- 4. Night light to enhance ability to see at night
- 5. If bladder control problems urinal or bedside commode

At Home Testing

5 Time Sit to Stand Test:

- Rise from sitting to standing 5 times in a row
- Record time taken to complete task
 - 12s or higher indicates need for balance referral
 - 15s or higher indicates high likelihood of fall in the next 12 months

Single Leg Stance Test:

- Attempt to stand on 1 leg without support of arms
- Try each leg, record time standing
 - 5s or less indicates high likelihood of falls

Timed Up & Go (TUG):

- Rise from a chair, walk 10 meters, turn around and return to sitting in the chair
- Record time taken to complete task
 - 13s or higher indicates high likelihood of falls



How Can I Improve My Balance?

- Regular aerobic exercise
- Regular strength training
- Flexibility work







Exercise is Medicine!



How Physical Therapy Can Help You

1

Test 3 sensory systems with state of the art equipment

2

In-depth testing of Vestibular system with IVOG

3

Gait testing to identify dynamic balance concerns or need for orthotics

4

Test Flexibility of core and lower extremities

5

Test Strength of core and lower extremities

6

Design a physical therapy plan of care to address deficits found for return to safe active lifestyle



Real Life Success Story

Peter, a 95 year old patient of Fyzical Traverse City, MI, had goals: to reduce his number of falls, improve his balance, and remain living independently.

Watch his story!

https://www.youtube.com/watch?v=vBvzBmEwn s&t=11s



THANK YOU



YOUR



