

# Mobility Management in the Complex Care Patient

The Role of Physical Therapy to Facilitate Safety in the Home and Community

Rebecca Hilty, PT, Cert MDT 10.13.2023

#### It Happens More Than You Think....

- Falls are the leading cause of fatal & non-fatal injuries in older adults
- The National Council on Aging reports that 1 in 4 adults 65+ falls yearly
- CDC statistics show that 36M falls are reported yearly in older adults, resulting in over 32K deaths annually



#### Therapy to the Rescue!

- Of the 4M's, <u>mobility</u> has direct implications for safety at home and in the community
- Important to assess mobility skills as we age
- PT should always be part of a comprehensive 4M evaluation







## **Comprehensive PT Evaluation**

- Can be performed on an in-patient or out-patient basis
- Often helpful to include family or caregivers to provide perspective
- Starts with review of Med Hx—alerts therapist of involvement of the other 3M's
- Moves on to screening/evaluation of ROM, MMT, neuro status, sensation and proprioceptive responses, mobility skills and balance (static and dynamic)



10.13.2023

#### **Assessing Static and Dynamic Balance**



- TUG
- Tinetti
- Dynamic Gait Index (DGI)
- Berg Balance Scale
- 10x Sit-to-Stand (also 5x STS)
- Considerations for effort needed to complete the test and cognitive ability to understand the instructions of each



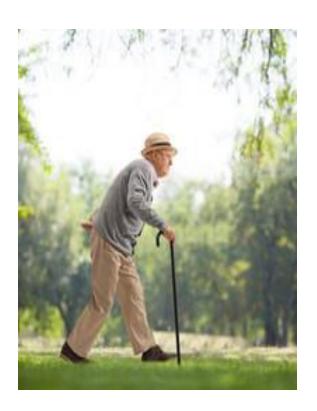
# **Berg Balance Scale**

- Developed in 1989 by Katherine Berg to assess balance in the elder (>73yo)
- 14 components typically taking 10-15 minutes to complete
- High relative reliability with inter-rater reliability at .97 and intra-rater reliability at .98
- Absolute reliability is stronger toward the higher end of the test as tasks become more complex
- <u>Normal Values:</u> people aged 69 w/out health issues affecting mobility would score 56/56
- Score decline w/increasing age at rate of .75 pts/year (ie- 71yo = 51/56)
- 0-20 w/c bound; 21-40 walk w/assistance; 41-56 independent balance; generalized cut-off for independent safety is 45/56
- Does not measure features of gait such as motor control or pace



## **Dynamic Gait Index**

- Another test of high reliability overall
- Decreased reliability in those with comorbid vestibular dysfunction
- Can be subject to "ceiling effect"; still used regularly
- 8 components; total score=24
- Scores < 19 show higher risk for falls





#### 5x Sit-to-Stand

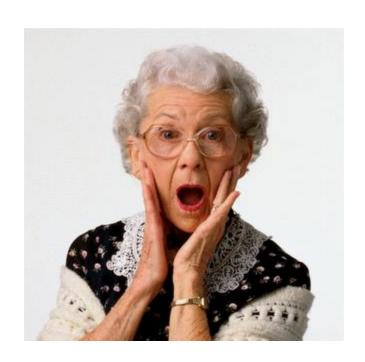


- Test of lower limb strength and balance combined
- Reliability at .937
- Frequently interchanged with a 30-second sit-to-stand test
- Norms range from 7.7 secs for the 50-59 age group to 16.7 secs for the 80-89 age group



#### So What Now??!!

- Once deficit is discovered, a comprehensive plan for PT care is created
- Includes: education for family/caregivers, recommendations for exercise or direct therapy services
- Recommendations for home modifications
- Evaluation and fit for proper mobility devices or DME





#### **Education**

- Critical for compliance with the Plan of Care
- With physicians, PA's and CNP's: important to know your resources (community & medical-based)-often first line of defense
- With family/caregivers: exercise supervision, home modifications, identifying status changes when they occur
- With the patient: they need a voice in their care



#### **Home Modifications**



- Picking up throw rugs
- Grab bars in bathrooms and on steps
- Lighting improvements around the home
- Replacing door knobs to handles for easier grip
- De-clutter the home
- Ramps for accessible entry





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# **Mobility Aids**

- Canes (single-point vs. quad)
- Walkers (standard vs. rolling)







#### Wheelchairs



- Manual vs. power chairs
- POV vs. PWC
- Consideration for posture control, cognition and comorbid visual or coordination deficits
- PT should facilitate connection to an appropriate vendor for ATP assessment (sometimes funding based)
- PT to complete support documents for funding



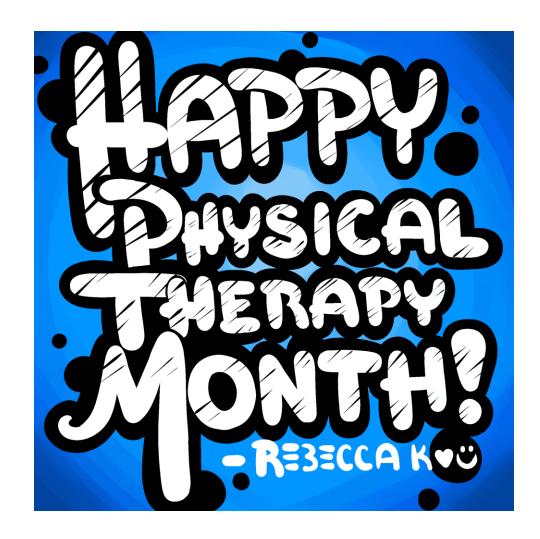
# **Summa Health Therapy**

- All sites have been designated "Age-Friendly" through IHI
- Comprehensive services: PT/OT/SLP
- Spans Summit County; now in Medina and Portage Counties
- Easy referrals through EPIC; of through Central Scheduling (if out of network)
- Trained clinicians to address mobility and safety needs





# Thank you!!!





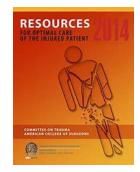


## Senior Health Symposium-Mobility Breakout

Alexandra Carpenter
Trauma Program Manager
Level I Trauma Center

#### What is a Trauma Center?

- All trauma centers in Ohio are verified by the American College of Surgeons
  - Every 3-year re-verification process
  - o Levels I-IV
    - There are currently no level IV centers in Ohio
- Injury Prevention is a core focus of a Trauma Program
- "Old" Standards (Orange Book)
  - 387 criteria (Criterion Deficiencies (CD))/standards to meet
  - "New" Standards (Grey/Charcoal Book)
- Summa Health-Akron Campus was the **1st** Trauma Center in the Akron area verified by the American College of Surgeons in 1997
- 2023 marks the 25<sup>th</sup> year Summa Health System -Akron Campus has been verified as a Level I Trauma Center









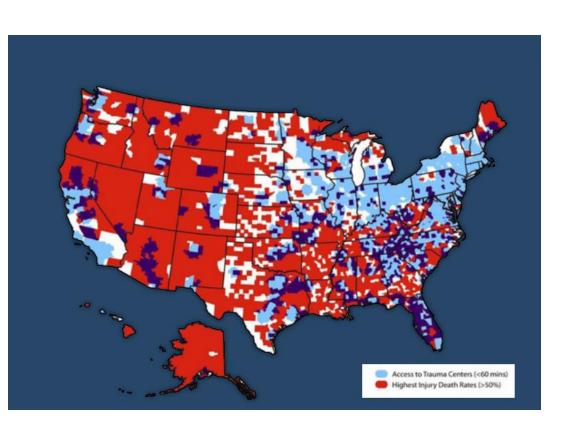
#### What is a Level I Trauma Center

- Full range of specialists and equipment, available 24hours a day
- Admits a minimum required annual volume of severely injured patients (>1,200 per year)
- Research Program
- A leader in trauma education and injury prevention
- A referral resource for communities in neighboring regions through community outreach
- The Level I trauma center must have a program for substance abuse screening and provide brief intervention to patients as appropriate
- Robust residency programs
- In the state of Ohio, only verified Trauma centers are the mandated destination for injured patients transported by EMS



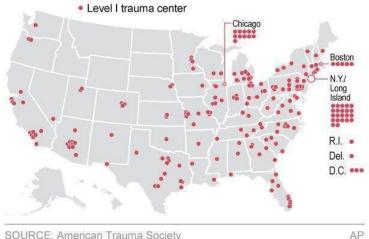


## Trauma Center Access Across the Country



#### Trauma care

Large areas of the United States are not served by top medical facilities equipped to care for every aspect of injury, known as Level I trauma centers.



SOURCE: American Trauma Society



#### What is a Trauma Program

- The Trauma Program is the infrastructure within a Trauma Center that maintains the center's Trauma accreditation
- Injuries can occur in any or multiple organ systems; the Trauma Program transcends normal departmental hierarchies to provide the primary and consistent structure for ensuring appropriate and efficient care to all injured patients.
- The Program continuously monitors and improves the quality of care provided to **all injured** patients throughout the hospital from the Pre-Hospital phase to Rehabilitation









**Injury Prevention Initiatives** 

## **Injury Prevention**

TRAUMA is not an accident, Trauma is LARGELY PREVENTABLE

#### Community Outreach:

- Gun Safety
- Safe Driving
- Falls Prevention
- Fire Safety
- Stop The Bleed<sup>®</sup>











Work collaboratively with many community partners:

- Safe Communities including:
  - Summit County Sheriff's Office, driving schools, elementary and High Schools
- Partners 4 Safety including Akron Fire Department, local pharmacies
- Collaboration amongst area trauma Programs to broaden the reach of Fall Prevention courses.



#### Stepping On®

#### Stepping On A *Free* Fall Prevention Workshop

When: Mondays, 10:00a-12:00p September 18 through October 30, 2023 Where: Kohl Family YMCA 477 E Market St, Akron OH 44304



#### Stepping On has been proven to reduce falls by 31%!!

Falling is not a normal part of aging. Join us, and in just seven weeks, you will learn:

- To identify and remove fall hazards both inside and outside of your home
- How different factors can affect your risk of falling
- Strength and balance exercises
- How to effectively get back on your feet if a fall does occur



#### Registration is Required!

Contact:

Amy Hirnikl at (330) 375-7069; hirnikla@summahealth.org

Or

Nicole Yost at (330) 489-1111 ext 3546; yostn@ccf.org







- The Ohio Department of Health (ODH) is the recipient of an Administration for Community Living (ACL) grant, in which funding has been provided to sustain and expand balance and mobility programming in Ohio.
- Evidence Based Program, proven to reduce falls by 31% in the community
- 7 week program for individuals that have fallen or have a fear of falling
- Stepping On focuses on:
  - Falls and risk
  - Strength and balance exercises
  - Home hazards
  - Safe footwear
  - Vision and falls
  - Safety in public places
  - Community mobility
  - Coping after a fall
  - Understanding how to initiate a medication review
- Course limitations for individuals that have memory problems or totally dependent on assistive walking devices

#### **Matter of Balance**

- Evidence Based Fall Prevention Program
- Small Group classes of 8-12 participants
- Led by trained coaches
- 8 two-hour sessions
  - Once per week for 8 weeks or
  - Twice a week for 4 weeks





MANAGING CONCERNS ABOUT FALLS

- Matter of Balance enables participants to reduce the fear of falling by:
  - o Learning to view falls as controllable,
  - Setting goals for increasing activity levels,
  - Making small changes to reduce fall risks at home
  - Exercises to increase strength and balance
- Targets adults 60+ who are ambulatory, able to problem solve, concerned about falling, interested in improving flexibility, balance and strength, who may have fallen in the past, and have restricted their activities because of concerns about falling.



#### **Bingocize®**



- Evidence Based Fall Prevention Program
- Incorporates exercise, nutrition, and falls prevention within the game of bingo
  - Motion
  - o Balance
  - Muscle strengthening
  - Endurance exercises
- Bi-weekly 10 week workshop
- 45-60 minute sessions
- Virtual Program
- Pre and Post Test submissions after every course

- Bingocize® targets sedentary, older adults at all physical and mental ability levels in a variety of settings including
  - Certified nursing facilities
  - Assisted living
  - Independent living
  - Community senior centers





#### **Trauma Program Partnerships for Injury Prevention Activities**









#### **Partners 4 Safety**

- Akron Fire Department
- Area Agency on Aging
- Akron Children's Hospital
- Sand Run Pharmacy
- Cleveland Clinic Akron General
- County of Summit
- American Red Cross
- Summit County Prosecutors Office
- United Way of Summit County

#### **Safe Communities**

- Summit County Sherriff's Office
- The Coroner's Office
- AAA
- Drive Team
- Driving Schools of Ohio
- Akron Police Department
- Ohio Department of Transportation
- Blossom Music Center
- CSX Railroad Police
- Akron Fire Department
- Summit County Fairgrounds



#### **Questions?**







Aging in Place Program

Creative Community Partnerships Helping

Seniors Age In Place

# **About Habitat for Humanity**

Mission: Seeking to put God's love into action, Habitat for Humanity brings people together to **build homes**, **communities**, **and hope**.

Vision: a world where everyone has a decent place to live.

Habitat for Humanity believes that **decent shelter is a fundamental right**. We work to ensure that families in our community have access to **affordable housing opportunities** through a number of programs.

We seek to build stable families, and vibrant communities.

#### What is the need?

With **10,000** Americans turning **65** EVERY DAY, this is one of the fastest-growing age groups in the U.S. By 2030, 20% of the US population will be age 65 or older.

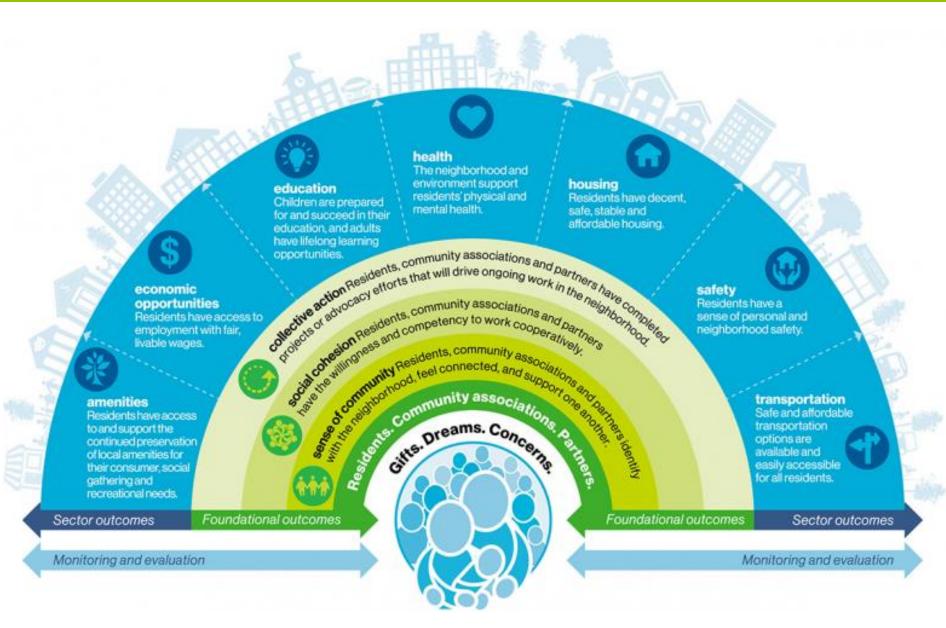
But a troubling reality is that many older adults, **about 19 million**, are living in homes that are in disrepair or inadequate for their needs and they are unable to access resources to make these places livable.

https://www.habitat.org/our-work/aging-in-place

Locally, we have received **123 Aging In Place applications** since Fall 2020. **48 Aging In Place repairs** have been completed since 2021.

# Housing Plus Aging In Place

A Habitat for Humanity International Initiative



**Quality of Life Framework** 

# The *Housing Plus* Difference

This person-centered approach uses two different assessments to tailor the process to each homeowner's needs:

- 1. A <u>home repair evaluation</u> by a **construction specialist** from the local Habitat organization.
- 2. A <u>holistic assessment</u>, completed in coordination with a **local human services professional**. During this assessment, the homeowner discusses their activities of daily living, such as bathing, dressing and eating, as well as how they pay bills, clean their homes, communicate with others, run errands and manage any medications they take.

These assessments allow Habitat to address the older adult's needs holistically, improving the likelihood they can age in place safely.

# **Expanding on the HFHI Foundation**

Participating in the Geriatric Workforce Enhancement Program (GWEP) has provided Habitat for Humanity of Summit County the unique opportunity to **build relationships** with healthcare professionals in our city, county, state AND nationwide.

Partnering with GWEP also allowed for the **Care Management Interprofessional Team (CMIT)** to be integrated into our
Aging In Place program structure to assist our team in
providing comprehensive wellness solutions for homeowners
with complex health and housing needs.

# Habitat for Humanity of Summit County's Aging in Place Program

Overview, Services Provided and Outcomes

# **Program Goals**

# Habitat for Humanity of Summit County's Aging in Place program seeks to accomplish the following:

- Reduce homeowner risk and fear of falling while completing normal activities of daily living
- Ensure that homes are safe and accessible for homeowners age 60 and older
- Connect homeowners to healthcare services that can improve their quality of life

# **Meet Our Habitat Program Staff**

#### **Rochelle Sibbio**

**President & CEO** 

#### **Marissa Little**

Vice President & Chief Program Officer

#### **David Holden**

Home Repair Manager

#### Deion Hampton, Alan Cannon & Devon Halvorson

**Home Repair Site Assistants** 

#### **Briana Cantrell**

Family Service Manager

#### **Craig Sisak & Emily Vailoces**

Independently Contracted PT & OT, complete Holistic Assessments

# **Summa Health Pilot Program**

Habitat for Humanity of Summit County launched our Aging In Place program in partnership with Summa Health.

Pilot Timeline: November 2020 - December 2021

**Pilot Location:** The pilot program was implemented in the Middlebury neighborhood in the City of Akron as well as in the City of Barberton.

**Summa Health Sponsorship for the Pilot Program:** \$15,000 - up to \$2,500 critical home repair/interior modification assistance provided to each of the six homeowners.

# Aging in Place Program Steps \*

**Identify Homeowners** 

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Application, Qualify Homeowners

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Coordinate in-home assessments (OT/PT and HFHSC)

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Schedule CMIT (Care Management Interprofessional Team)

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CMIT Team Meeting and Follow Up

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Schedule home repairs and interior home modifications

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Evaluation and Outcomes (post assessment by HFHSC)

# **Common Services Provided**

# Accessibility modifications made by Habitat for Humanity of Summit County may include:

- Ramps
- Grab bars
- Tub cuts
- Lever style door knobs
- Technology
- Smoke & Carbon Monoxide detectors
- Gates
- Handrails
- Interior and exterior lighting
- Non-slip flooring & flooring repair
- ADA compliant toilets
- Along with any of our existing Exterior Home Repair construction options (see application)

# **Aging In Place Key Partners**

#### **Program Partners**

- Summa Health
- Direction Home Akron Canton Area Agency on Aging
- GWEP Healthcare Professionals & CMIT

#### **Funding Partners**

- Foundations: Summa Health, Tuscora Park Health and Wellness, FedEx Custom Critical, Northern Ohio Golf Charities, Lowe's, Habitat Ohio (Ohio Dept. of Development)
- Local Municipalities: City of Akron
- State/Federal Support: Habitat for Humanity International Federal HUD Section 4 Capacity Build Grant, State of Ohio ARPA, HRSA GWFP

# **Program Outcomes**

Completed **6 home repairs** in 2020-2021 with Summa Health as a pilot to launch the initiative, **18** total Aging in Place repairs in 2021, **30** total Aging in Place repairs in 2022 and **42** by the end of 2023

Provided between \$2,000 and \$15,000 in subsidy for qualified homeowners to reduce the financial barriers to service

Awarded **CDC Grant from the City of Akron** in 2022 to provide THIRTY Aging In Place repairs/modifications in "middle neighborhoods" identified in Planning to Grow Akron 2.0. Zip codes targeted are 44305, 44310, 44314, and 44320.

# Aging in Place & Age Friendly

We view the Aging In Place program as a natural continuation of the ongoing effort to make our county **Age-Friendly**.

The Age Friendly initiatives addresses a multitude of quality of life issues, including housing.

We believe our Aging In Place program is a key piece to the puzzle and we want to grow our capacity to serve more homeowners in ALL of Summit County.

# How can YOU help?

 Spread the word – to homeowners about our Aging In Place program! More information on the program can be found here:

https://www.hfhsummitcounty.org/aginginplace

- Partner with us to raise additional resources and support.
- Invite us we would welcome opportunities to share this information with your clients or organization leadership.

# Case Presentation

Habitat for Humanity of Summit County Aging in Place program