An Interprofessional Approach to Falls and Gait Assessment

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Outline

- Fall Defined
- Risk Factors for Falls
- Fall Risk Assessment
- Fall Risk Considerations
- Environmental Context
Falls Defined – Collaborate

- What is a “fall”?
  - Organize yourselves into IP groups (no more than 2 from each profession in each group)
  - Develop your BEST interprofessional definition for a “fall” that you will use in the clinic
    - Consider your definition as a healthcare provider
    - Consider how your patient might define a “fall” – this is important

- Report out
Risk Factors for Falls – Collaborate

- In the same IP groups, decide which of the following factors each of your professions would most likely be able to address during the course of a usual patient care visit.
- Consider also which other professions should be included.

Report Out

- Fall history
- Muscle weakness
- Sensory deficits
- Balance problems
- Gait problems
- Assistive device use
- Visual deficits
- Arthritis
- Depression
- ADL limitations
- Age > 80 years

- Sex (Female)
- BMI (> 30)
- Physical activity levels
- Fear of falling
- Polypharmacy
- Certain medications (e.g. psychotropic medications)
- Extrinsic factors (environment)
- Cognition

* A multifactorial assessment is needed.

An interprofessional assessment would be ideal!
Guideline for the Prevention of Falls in Older Persons

*See pdf document*
Fall Risk Assessment - Collaborate

- *In the same groups, discuss the following:*
  - How would your interprofessional fall risk assessment look different in the inpatient vs. outpatient vs. community settings?

- **Report Out**
  - Setting differences?
  - Are there any other factors that you might want to assess that weren’t listed on the “Risk Factors” slide?
Fall Risk Assessment

Tools

- Timed Up and Go (Get Up and Go)
- Dynamic Gait Index
- Berg Balance Scale
- Chair Rise Test
- Morse Fall Scale
Timed Up and Go - Collaborate

- In the same groups, teach each other the Timed Up and Go test.

Report Out
- How did it go?
- Did you learn any helpful tips?
- What all can you assess with this test?
Timed Up and Go Test (TUG)

- Cut-off score for high fall risk (>13.5 seconds)
  - Other cut-off scores?

- Quantitative, but consider the qualitative aspects too

- Demonstration

- Video: https://www.youtube.com/watch?v=avYIUskim_l

- Resource: http://gsa.buffalo.edu/DPT/tug_0109.pdf

Dynamic Gait Index (DGI)

- 8-item scale, walking
- Classifies fall risk:
  - Predictive of falls (≤ 19/24)
  - Safe ambulators (> 22/24)
- Video:
  [YouTube Video Link](https://www.youtube.com/watch?v=N02ybZoOwD4)
- Resource:
  [Website Link](http://web.missouri.edu/~proste/tool/dgi/index.htm)

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5. Gait and pivot turn

*Instructions:* Begin walking at your normal pace. When I tell you, “turn and stop,” turn as quickly as you can to face the opposite direction and stop.

*Grading:* Mark the lowest category that applies.

- (3) Normal. Pivot turns safely within 3 seconds and stops quickly with no loss of balance.
- (2) Mild Impairment: Pivot turns safely in > 3 seconds and stops with no loss of balance.
- (1) Moderate Impairment: Turns slowly, requires verbal cueing, requires several small steps to catch balance following turn and stop.
- (0) Severe Impairment: Cannot turn safely, requires assistance to turn and stop.
Berg Balance Scale (BBS)

- 14-item scale, including easy to challenging items for most populations
- Classifies fall risk:
  - Low (41-56/56)
  - Medium (21-40)
  - High (0-20)

![STANDING UNSUPPORTED WITH EYES CLOSED](image)

INSTRUCTIONS: Please close your eyes and stand still for 10 seconds.

- 4 able to stand 10 seconds safely
- 3 able to stand 10 seconds with supervision
- 2 able to stand 3 seconds
- 1 unable to keep eyes closed 3 seconds but stays safely
- 0 needs help to keep from falling

- Video: [http://www.youtube.com/watch?v=NX2LD5G3BFO](http://www.youtube.com/watch?v=NX2LD5G3BFO)


Chair Rise Test (FTSS)

- Timed completion of 5 sit-to-stand transitions
- Classifies fall risk:
  - Recurrent fallers (> 15 seconds)

Video:  [http://www.youtube.com/watch?v=PiSqEEw_BjM](http://www.youtube.com/watch?v=PiSqEEw_BjM)

Resource:

Morse Fall Scale

- **6 Questions**
  - History of falls (yes/no)
  - Secondary Diagnosis (yes/no)
  - Ambulatory Aid (bed rest/nurse assist, crutches/cane/walker, furniture)
  - IV/Heparin Lock (yes/no)
  - Gait/Transferring (Normal/bed rest/immobile, weak, impaired)
  - **Mental Status** (Oriented to own ability, forgets limitations)

- **Classifies fall risk**
  - No Risk (0-24)
  - Low Risk (25-50)
  - High Risk (≥ 50)

- **Resource:**
  [http://www.networkofcare.org/library/Morse%20Fall%20Scale.pdf](http://www.networkofcare.org/library/Morse%20Fall%20Scale.pdf)

Fall Risk Assessment Considerations - *Collaborate*

- Discuss in your IP groups some of the advantages and disadvantages of fall risk assessment tools.

- Report Out
  - Advantages
  - Disadvantages
  - Walker & Gait Belt Demo

- Considerations
  - Normative Values: Are they appropriate for all patients?
  - Is one assessment sufficient?

- Resources
  - [http://geriatrictoolkit.missouri.edu/](http://geriatrictoolkit.missouri.edu/) (list)
Environmental Context

- In your interprofessional groups, what would each professional want to assess in the home environment context?

Environmental Assessment
  - Home Environment
    - OT/PT referral
  - Useful tools:
    - [http://agingresearch.buffalo.edu/hssat/assessment.pdf](http://agingresearch.buffalo.edu/hssat/assessment.pdf)
    - Comprehensive Assessment and Solution Process for Aging Residents (EHLS)

  - Community Environment
  - Personal

- See Common Fall Prevention Strategies handout – related to these environments
Uniprofessional

Interprofessional
Community Resources

- National Council on Aging

- Shepherd’s Center
  - http://www.shepherdscenterkck.org/

- Link for Care
  - https://www.linkforcare.org/Provider/SearchByCategory/21

- Aging in Place (Lifewise Renovations)
  - http://lifewiserenovations.com/
Community Resources

Take Control of Your Health

6 Steps to Prevent a Fall

1. Talk to your health care provider. Ask for a fall risk assessment.
2. Regularly review your medications with your doctor or pharmacist.
3. Get your vision and hearing checked annually & update your glasses.
4. Keep your home safe. Remove tripping hazards, increase lighting, make stairs safe, and install grab bars.
5. Exercise safely based on recommendations from your health care team.
6. Talk to your family and friends. Falls are not just a senior’s issue.
Community Resources

ASSISTIVE TECHNOLOGY
- Assistive Technology for Kansans 785-267-1717
- Rehabilitation Institute of KC 816-751-7783

EMERGENCY MEDICAL ASSISTANCE DEVICES
- Alert 1 888-744-9890
- Phone-4-Help 800-842-0074

EXERCISE PROGRAMS
- Landon Center on Aging 913-588-0716
- YMCA of Greater KC 816-561-9622
- YMCA KCK 913-378-9255
Community Resources

EXERCISE PROGRAMS
- Gold’s Gym KCMO Silver Sneakers 816-931-9888
- Bethel Neighborhood Center 913-371-8218

FOR THE HOME
- Amramp Kansas City (home ramps) 816-916-7277
- Bath Innovations Walk-In Bathtubs 913-912-1750
- Mobility First 816-350-7600

VESTIBULAR REHABILITATION
- Blue Valley Physical Therapy 913-897-1100
Community Resources

GENERAL INFORMATION

- Alzheimer’s Association 1-913-831-3888
  http://www.alz.org/kansascity
- Area Agency on Aging 1-913-573-8531
  http://www.wycokck.org
- Caregiver Action Network
  http://www.caregiveraction.org
- National Alliance for Caregiving
  http://www.caregiving.org
- National Alliance on Mental Illness 1-816-931-0030
  http://www.namikc.org/support
# Community Resources

## ADULT DAY CARE

- **Bristol Manor**  
  [http://www.bristol-manor.com](http://www.bristol-manor.com)  
  1-888-826-0404

- **Brookside Adult Day Healthcare**  
  [http://www.brooksideadultdaycare.com](http://www.brooksideadultdaycare.com)  
  1-816-926-9400

- **The Essex**  
  [http://www.theessex.net](http://www.theessex.net)  
  1-816-443-3992

- **KC Adult Recreation Center**  
  1-913-299-0800
Community Resources

ALZHEIMER’S/DEMENTIA HOUSING

- Aberdeen Village
  1-913-624-1750
  http://www.aberdeenvillage.org

- Autumn Terrace Health and Rehab
  1-816-358-8222
  http://www.autumnterrace.com

- Bickford Senior Living
  1-913-826-6127
  http://www.enrichinghappiness.com

- Care Haven Homes
  1-913-643-0111
  http://www.carehavenhomes.com