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Addressing Geriatric Falls in the Outpatient Setting: A Prevention Initiative

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HINESBURG FAMILY MEDICINE; HINESBURG, VT

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Problem

- ▶ Approximately 25% of adults ≥ 65 years old fall each year¹
 - ▶ One in five of these incidents result in serious injury²
- ▶ Falls are the leading cause of fatal/non-fatal injuries in Vermont³
- ▶ Fall death rates for older adults in the United States increased by 30% from 2007 to 2016²
- ▶ Many patients at risk for falling are uneducated regarding environmental, physical, and/or behavioral risk factors that could be contributing to their fall risk⁴
- ▶ Fall prevention counseling is often limited in the outpatient setting due to time constraints⁴

Public Health Cost

- ▶ By 2020, the financial burden of geriatric falls is expected to be greater than \$67 million dollars in the United States⁵
- ▶ Vermont ranked **41st** in the nation with respect to the percent of older adults with self-reported falls in the past 12 months according to the United Health Foundation's "*America's Health Rankings*"
 - ▶ 31.7% of older adults in Vermont report falling in the past 12 months (national average 28.7%)⁶
- ▶ Over 1,600 Vermont older adults were hospitalized and an additional 5,445 were treated in the emergency room for falls in 2014³
- ▶ Approximately 29% of older adults in Vermont report engaging in no physical activity outside of their regular jobs in the past 30 days, strongly contributing to their fall risk⁶

Community Perspective on Falls

Tammy Murray - Clinical Care Associate Perspective – Hinesburg Family Medicine

- ▶ “[Falls remain a prevalent issue in Hinesburg (and Vermont at large)], despite fall risk screening being a recent health promotion goal at the [Hineburg Family Medicine practice].”
- ▶ “Time constraints in the office setting often limit fall prevention discussions.”
- ▶ Older adults present with a multitude of health issues to discuss during their visit leading the focus of the appointment away from fall prevention discussions.
- ▶ “If we had something that could help cue us to discuss falls in older adults, we may be more likely to remember to have these conversations.”

Cynthia Minnick – 83 y.o. Extended Care Facility Resident with a History of Falls

- ▶ “[The extended care facility] does a lot to try to decrease falls, but we still have a lot of them around here.”
- ▶ “I fell two times last year. Luckily, they weren’t too bad. I don’t even remember why I fell the first time. The second time, I was just walking around my room.”
- ▶ “I have doctors appointments all the time. We don’t really talk about falls, but he looks at my feet because I have neuropathy.”
- ▶ “[The extended care facility staff] puts on [aerobics] classes and does some stuff with weights, but my arthritis is really bad. I’m too old to do that stuff.”
- ▶ “I take a lot of medications. I have high blood pressure and neuropathy. I don’t know if [my medications] have anything to do with [my falls] or not.”

Other Perspective’s from UVM Physical Therapy Team

- ▶ No consistent, organization-wide discharge instructions/suggestions exist for geriatric patients at risk for falls
- ▶ “I recommend using the CDC Stopping Elderly Accidents, Deaths & Injuries (STEADI) initiative for general information and guidance.”
- ▶ “[This would be] a great opportunity to deliver a clear concise message from a large group of trusted individuals.”

Intervention & Methodology

- ▶ Develop clear, concise guidelines for geriatric patients at Hinesburg Family Medicine that would focus on addressing **environmental** (home hazards), **behavioral**, and **pharmacological** factors that may be increasing fall risk in geriatric population in accordance with the CDC's STEADI initiative
 - ▶ A component of these guidelines will focus on providing specific physical activity recommendations and dispelling myths regarding aging and exercise (with the assistance of UVM PT)
- ▶ Develop easy-to-understand office literature in patient rooms/waiting areas containing these guidelines that would prompt older adults as well as office staff to have discussions about geriatric fall prevention during patient appointments
- ▶ Create discharge instructions in the form of an easily insertable Epic .dot phrase, which would allow providers to counsel patients regarding simple lifestyle/environmental modifications to decrease their fall risk

Results

- ▶ Office literature and discharge Epic .dot phrase created for geriatric patients & provider highlighting the importance of:
 - Identifying and combating home fall hazards (take-home checklist for patients to improve safety of home)
 - Speaking to your provider if patient is concerned about falling or has recently suffered a fall
 - Medication reviews including supplements and over-the-counter drugs
 - Regular eye and foot examinations
 - Engaging in regular physical activity (exercise recommendations as well as specific aerobic/strength training activities to meet these guidelines)
- ▶ Positive feedback regarding the utility of these materials was expressed by office staff as well as geriatric patients

Preventing Falls at a Glance: Strategies to Decrease Fall Risk & Improve Function in Older Adults



① Identify Home Hazards
Use the following fall prevention checklist to identify and correct home fall hazards.

- I have to walk around clutter and/or furniture while walking through my home.
 Yes No *If "Yes," adjust furniture and remove clutter to clear your path.*
- There are thick carpets (e.g. shag) and/or throw rugs in my home.
 Yes No *If "Yes," remove shag and/or throw rugs or secure throw rugs with non-slip backing.*
- There are cords/wires/cables extending across walking spaces in my home.
 Yes No *If "Yes," wrap excess cord and secure it against the wall. Consider installing additional outlets to prevent cords across walking space.*
- Rooms, hallways, and/or stairwells are dimly lit in my home.
 Yes No *If "Yes," request assistance installing additional lighting.*
- I wear socks and/or slippers in my home.
 Yes No *If "Yes," wear shoes with non-slip tread while walking in home.*
- I have difficulty climbing stairs in my home.
 Yes No *If "Yes," assure railings and stair carpet are securely fastened. Consider installing a stairlift to travel up and down stairs.*
- I have difficulty getting into/out of the shower and/or onto/off of the toilet.
 Yes No *If "Yes," install hand grab bars both inside the shower and next to the toilet. Place a non-slip mat in the shower for added traction.*

② Speak Up: Talk to Your Provider

- Review medications (including over-the-counter & supplements)
- Receive regular eye exams & replace eyeglasses as needed
- Receive regular foot exams & discuss proper footwear
- If you are concerned about falling, or recently suffered a fall, talk to your healthcare provider.
- Your healthcare provider can help identify physical, environmental, and/or pharmacological factors that may be contributing to your fall risk.

- ▶ Interest raised by PT to develop guidelines into universal, organization-wide initiative

③ Stay Active: Improve Your Function

Engaging in regular physical activity can improve strength, balance, and coordination, reducing your risk of falling.

Physical Activity Recommendation

- Adults aged 65 and older should strive to engage in 150 minutes of moderate intensity aerobic activity per week

AND

- Strength training at least 2 times per week working major muscle groups

④ Aerobic Exercise Suggestions

Walking: Walk in bouts of at least 10 minutes with well-fitting sneakers with good tread. Try walking alone or with a friend!

Cycling: Cycle in bouts of at least 10 minutes, adjusting resistance as needed. A good low-impact option for individuals with arthritis.

Water Aerobics: Consider taking a beginner's class. Also good for individuals with arthritis.

Improving Balance & Flexibility with Tai Chi: Studies have shown tai chi to reduce falls and improve balance & flexibility in older adults.



⑤ Strength Training For Fall Prevention
Use the **Chair Stand Exercise** below 2-3 times per week to improve leg/hip strength & balance.

Sit in a sturdy chair with your back straight and feet flat on the floor.

Using your hands as little as possible, slowly rise from the chair to a full stand.

Slowly, return to the seated position.
Repeat: 10-15 times.





Dispelling Myths about Aging and Exercise

- I have never exercised before, it is too late to start...
...It is never too late to begin an exercise program.
- I cannot exercise because of my arthritic joints...
...Exercise actually helps relieve arthritic joint pain.
- I need to go to a gym to exercise...
...Many effective exercises can be done right at home.
- I should save my strength and energy for my daily activities rather than exercise...
...Exercise can increase your strength & energy.
- I am afraid I will fall and hurt myself while exercising...
...Regular exercise can actually help reduce your risk of falling.

Evaluation of Effectiveness & Limitations

Evaluation of Effectiveness

- ▶ Develop follow-up surveys to identify use of office literature and discharge instructions for geriatric patient population
- ▶ Evaluate trends in geriatric falls across Hinesburg, VT to determine whether intervention is having any impact on fall rate
- ▶ Conduct follow-up interviews in geriatric patients who were able to initiate environmental, pharmacological, and/or behavioral adaptations to their lifestyle to determine whether these changes are having any effect on their fall risk and/or overall function
- ▶ Follow-up with Hinesburg Practice Clinical Care Associates to determine whether literature/fliers are acting as a good “cue” leading to discussions about geriatric fall prevention with patients

Limitations

- ▶ In order to benefit from intervention, patients must visit Hinesburg Family Medicine practice
- ▶ Patients with reading difficulties/language barriers may be unable to utilize discharge .dot phrase instructions to address home safety/lifestyle modifications
- ▶ Despite increasing discussions regarding geriatric falls, providers still have limited time in office visits to discuss these issues with geriatric patients
- ▶ Difficulty in measuring adherence to fall prevention recommendations

Recommendations for Future Projects

- ▶ Expand the use of beneficial geriatric fall prevention discharge .dot phrases and literature handouts to other outpatient offices within the UVM health network and beyond
- ▶ Provide information regarding environmental, behavioral, and pharmacological factors contributing to fall risk directly to extended care facilities throughout Vermont as to target individuals who may infrequently visit outpatient practices
- ▶ Provide interventions to extended care facility staff on how to address environmental factors within their living spaces contributing to falls
- ▶ Provide an online forum by which geriatric individuals throughout the state could access fall prevention information

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