



# Engaging Older Adults in Fall Prevention Using Motivational Interviewing

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IN 2018

**1 in 4** older adults reported falling—  
**this equals about 36 million falls.**

Falls can threaten the health and independence of older adults.

More than **8 million**  
falls required medical attention or  
limited activity for at least a day.

More than **32,000**  
older adults died from falls—  
that's 88 older adults every day.

**STEADI**

**Stopping Elderly Accidents,  
Deaths & Injuries**

**Falls are not a normal part of  
aging—they can be prevented.**

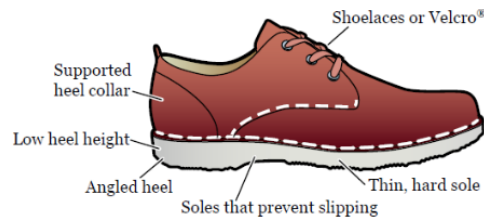
Older adults, caregivers, and healthcare providers can  
work together to reduce the risk of falling and prevent  
devastating injuries.



[https://www.cdc.gov/steady/pdf/STEADI\\_ClinicianFactSheet-a.pdf](https://www.cdc.gov/steady/pdf/STEADI_ClinicianFactSheet-a.pdf)

# Older adults do not consistently participate in fall prevention

- Falls can be prevented by 23-26% through fall prevention interventions<sup>1,2</sup>
- However, uptake of clinical recommendations vary
  - Only 11-50% of older adults make specific changes that involves behavior change to address their fall risks<sup>3,4</sup>



Unites States Preventative Services, American Geriatric Society, CDC STEADI Fall Prevention

1. Clemson et al., 2023. "Environmental Interventions for Preventing Falls in Older People Living in the Community." The Cochrane Database of Systematic Reviews
2. Hopewell et al. 2018, "Multifactorial and Multiple Component Interventions for Preventing Falls in Older People Living in the Community." Cochrane Database of Systematic Reviews
3. Sherrington et al. 2019. "Exercise for Preventing Falls in Older People Living in the Community." Cochrane Database of Systematic Reviews,
4. Nyman et al. (2012) Age Ageing. 41(1):16-23. doi:10.1093/ageing/afr103.
5. Kiyoshi-Teo et al. (in review).

# A sample primary care visit note to address fall risks

## Assessment and Plan:

██████████ has been evaluated for her risk of falling. The following contributors were identified:

BP has been assessed. Plan: No problem identified.

Vision has been assessed. Plan: No problem identified.

Feet and footwear have been evaluated. Plan: Counseled on appropriate footwear.

Gait and balance assessed. Plan: Tai Chi and balance classes advised.

Incontinence assessed. Plan: No problem identified.

Additional testing ordered: No testing indicated.

Medications have been reviewed with risk/benefits discussed. Plan: No medication changes advised.

Patient will continue to be screened annually for fall risk.

# Challenges to engaging older adults in fall prevention

Less than half of older adults who fall talk to their doctor about it. Providers can proactively ask about falls. <sup>4</sup>

"Older people fall but I don't fall" <sup>3</sup>

- **71%** of high fall risk older adults DO NOT identify themselves as high fall risk! <sup>2</sup>
- **48%** (or more!) of older adults DO NOT make changes in response to fall-prevention recommendations! <sup>5</sup>
- Older adults think about their fall risks often. Importance 9.7/10. <sup>1-2</sup>
- Talking about fall prevention feels threatening to independence and privacy. <sup>6</sup>

1. Kiyoshi-Teo H, Northrup-Snyder K, Cohen DJ, Dieckmann N, Stoyles S, Winters-Stone K, Eckstrom E. (2019). *J Gerontol Nurs*. Journal of Gerontological Nursing  
2. Kiyoshi-Teo, H., Carter, N., Rose, A. (2017). *MEDSURG Nursing*  
3. Haines TP, Day L, Hill KD, Clemson L, Finch C. (2014). *Arch Gerontol Geriatr*  
4. Nyman SR et al. (2012) *Age Ageing*. 41(1)  
5. Kiyoshi-Teo H, Miura LN. (May, 2018).. American Geriatric Society. Poster presentation.  
6. McMahon S, Talley KM, Wyman JF. (2011). *Int J Older People Nurs*

# Opportunity and challenges with fall prevention in ED

- Prevention of falls in the **community**
  - Patients coming to ED after a fall, a window of opportunity!
- Prevention of **ED falls**



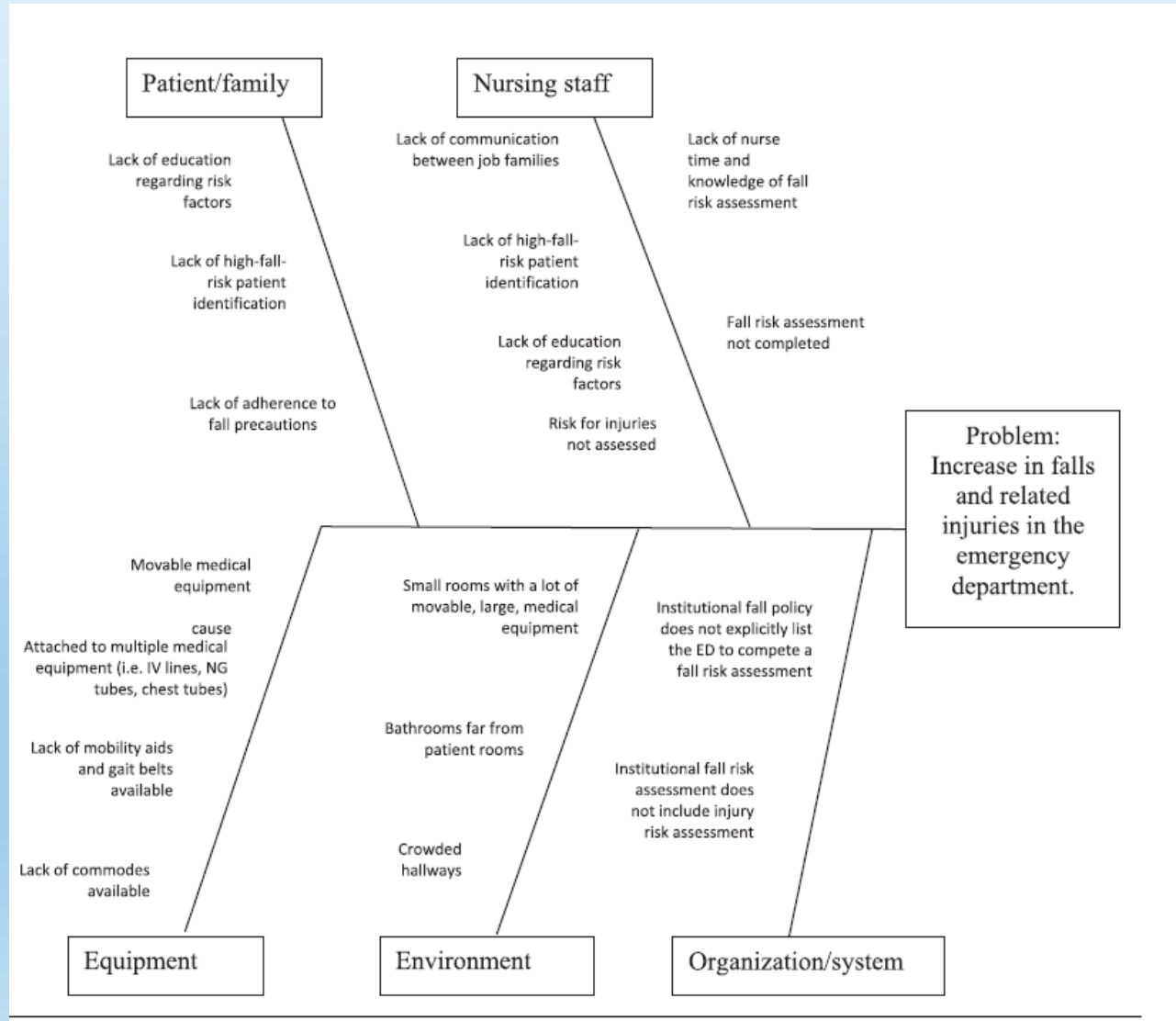
## Talking to patients about fall risks and fall prevention strategies effectively.

Alexander, D. et al. (2013). Journey to a Safe Environment: Fall Prevention in an Emergency Department at a Level I Trauma Center. *Journal of Emergency Nursing*, 39(4), 346–352.

LeLaurin, J. H., & Shorr, R. I. (2019). Preventing Falls in Hospitalized Patients: State of the Science. *Clinics in Geriatric Medicine*, 35(2), 273–283.



# Opportunity and challenges with fall prevention in ED



## Potential intervention

- Fall risk identification
- Alarms
- Sitters
- Intentional rounding
- Patient education
- Environment modifications
- Restraints
- Non-slip socks



Stoeckle, A. et al. (2019). Catching Quality Before It Falls: Preventing Falls and Injuries in the Adult Emergency Department. *Journal of Emergency Nursing*, 45(3), 257–264.

# Objectives

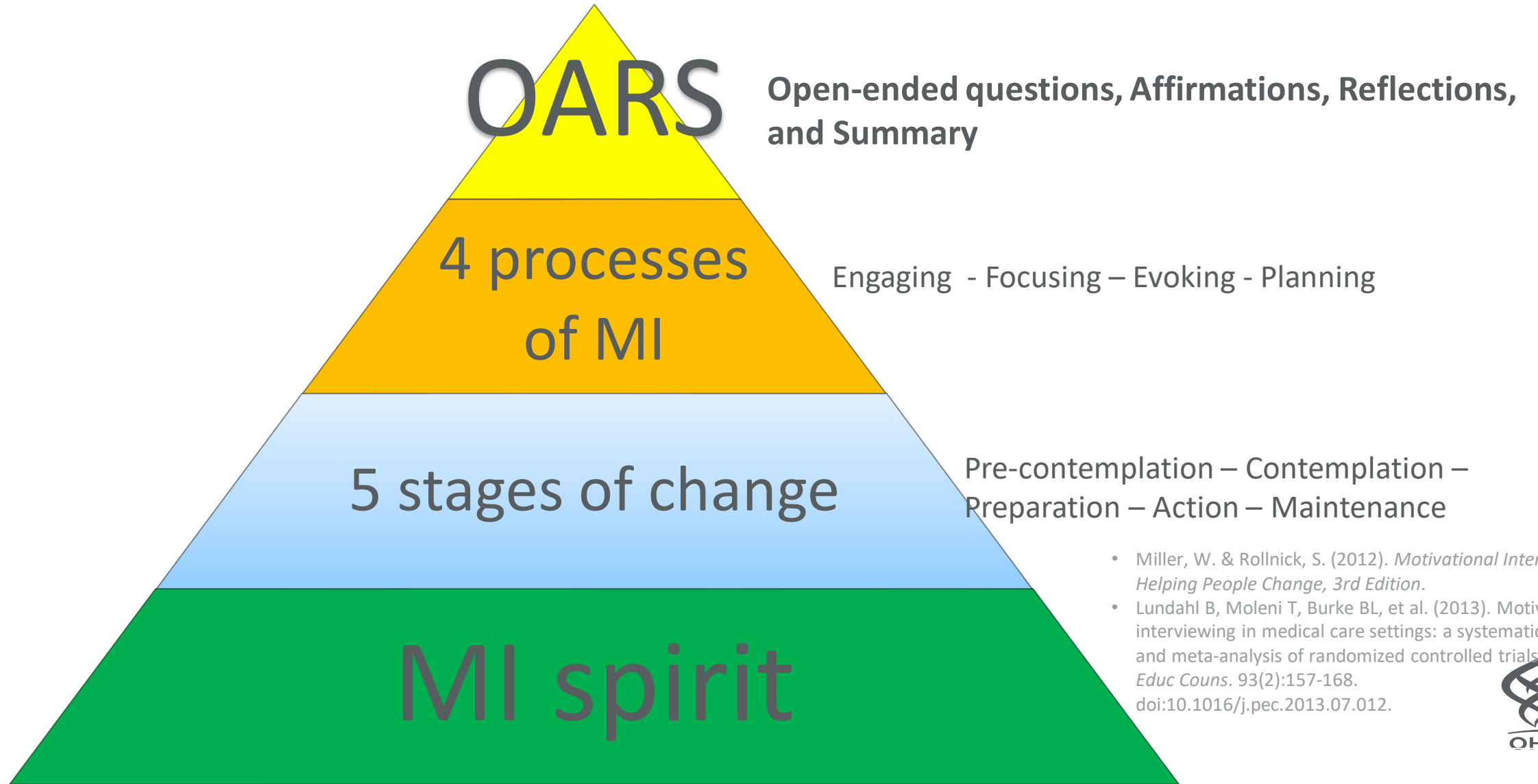
By the end of the session today, you will be able to describe:

- How **motivational interviewing (MI)** can be used to engage older adults in fall prevention.
- Learn about older people's views on fall prevention.
- Learn how you can use MI in your practice.



# Motivational Interviewing (MI)

patient-centered communication approach



- Miller, W. & Rollnick, S. (2012). *Motivational Interviewing: Helping People Change, 3rd Edition*.
- Lundahl B, Moleni T, Burke BL, et al. (2013). Motivational interviewing in medical care settings: a systematic review and meta-analysis of randomized controlled trials. *Patient Educ Couns.* 93(2):157-168. doi:10.1016/j.pec.2013.07.012.

# MI for all patients - assessment-

## Common fall prevention conversations

Have you fallen in the past three months?

Were there any injuries?

I'd like you to start using the walker because X.  
Walker will keep you safe and not fall.

## MI is especially helpful with patients with resistance (precontemplation stage)

- “I fell but I’m doing fine”
- “I’m not going to fall”
- “I’m doing everything I can do be safe”
- “I am very careful not to fall”



<https://www.shutterstock.com/image-photo/close-asian-old-man-face-elder-1150889288>

## Patients with ambivalence (contemplation stage)

- “I know I should use the walker, but I’m not there yet”
- “I should wait for you, but you seemed so busy”

## “Adapted” Motivational Interviewing to Engage Hospital Nurses in Fall Prevention Education

Hiroko Kiyoshi-Teo, PhD, RN,  
Kathlynn Northrup-Snyder, PhD, CNS, RN



ORIGINAL ARTICLE | [Full Access](#)

## Qualitative descriptions of patient perceptions about fall risks, prevention strategies and self-identity: Analysis of fall prevention Motivational Interviewing conversations

Hiroko Kiyoshi-Teo PhD, RN [✉](#), Kathlynn Northrup-Snyder PhD, RN, Mary Robert Davis BSN, RN, Ellen Garcia MN, RN, CCRN, Amy Leatherwood RN, MSN, FNP-BC, Shigeko (Seiko) Izumi PhD, RN, FPNC ... [See fewer authors](#) ^



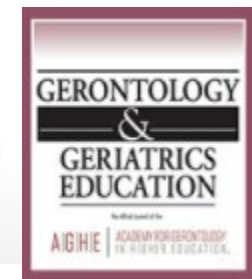
## Feasibility of Motivational Interviewing to Engage Older Inpatients in Fall Prevention: A Pilot Randomized Controlled Trial

Hiroko Kiyoshi-Teo, PhD, RN, Kathlynn Northrup-Snyder, PhD, RN, CNS, Deborah J. Cohen, PhD, Nathan Dieckmann, PhD, Sydnee Stoyles, MBST, Elizabeth Eckstrom, MD, MPH, and Kerri Winters-Stone, PhD [SEE FEWER AUTHORS](#) ^

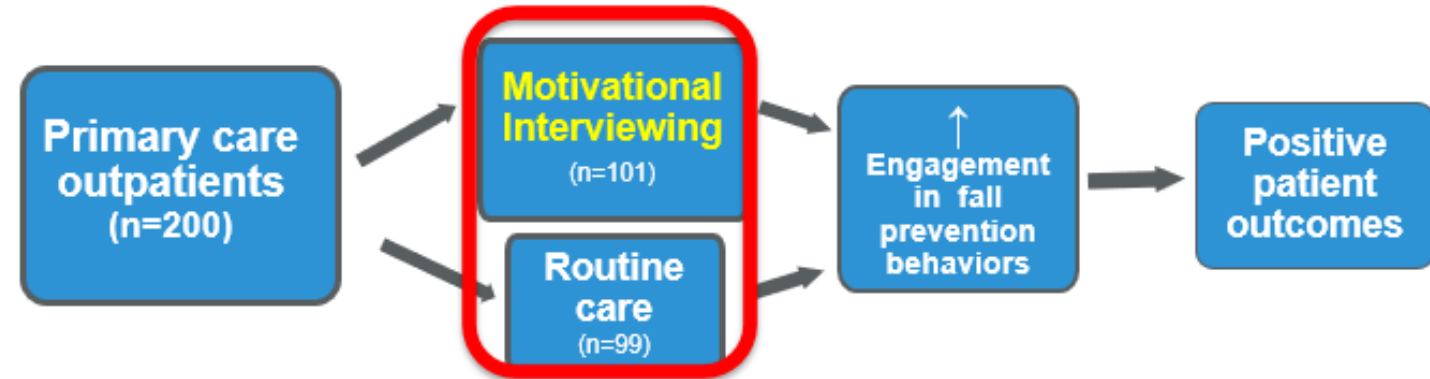
Research Article

## Feasibility study of student-led fall prevention care management: reducing fall risks in assisted living facilities

Hiroko Kiyoshi-Teo [✉](#) [b](#), Claire McKinley-Yoder, Olivia Ochoa-Cosler, Erin Lemon, Sydnee Stoyles, Ruth Tadesse, ... [show all](#)  
Published online: 31 Aug 2021



# Engaging older adults in fall prevention using motivational interviewing



- **Design:** Randomized controlled trial, mixed methods design
- **Data collection period:** Sept. 2020- Mar. 2023
- **Data collection methods:** Phone and video call
- **Eligibility:** Age  $\geq 65$ ; STEADI score  $\geq 4$ ; Given fall prevention recommendations; not severely cognitively impaired
- **MI intervention:** Delivered by trained MI practitioner via phone or video call

## The difference across time by the group for perceptions related to and engagement in fall prevention

	Intervention (n = 90)		Control (n = 95)		
	Mean (CI)	Effect Size	Mean (CI)	Effect Size	p-value
<b>Fall Efficacy Scale International-Short</b>					
Baseline	13.29 (12.23-14.35)	0.00	13.69 (12.67-14.72)	0.19	0.44
6 month	13.28 (12.11-14.45)		14.23 (13.12-15.33)		
<b>Level of confidence to prevent falls</b>					
Baseline	7.86 (7.51-8.20)	0.22	7.43 (7.09-7.77)	0.32	0.66
6 month	8.12 (7.78-8.47)		7.82 (7.49-8.14)		
<b>Patient Activation Measure</b>					
Baseline	68.13 (65.41-70.86)	0.24	67.99 (65.34-70.64)	0.11	0.59
6 month	70.56 (67.53-73.58)		69.17 (66.30-72.03)		
<b>Fall Behavioral Scale</b>					
Baseline	3.05 (2.95-3.15)	1.03	2.97 (2.88-3.06)	0.89	0.55
6 month	3.23 (3.13-3.33)		3.13 (3.03-3.22)		
<b>Notes:</b>					

Fall Efficacy Scale International-Short (7-28 scale; 28 indicates most concern about falling); Patient Activation Measure (0-100: 100 indicates most activated). Falls Behavioral Scale (1-4 scale: 4 indicates "always" implementing fall prevention behaviors"); P-values are for differences in change over time between groups.



# Theme #1. Older adults engage in unique combinations of fall prevention strategies

Leigh (96 y/o female; fictitious name):

Safe footwear

*Balance-focused exercises*

Daily walks

Use of cane

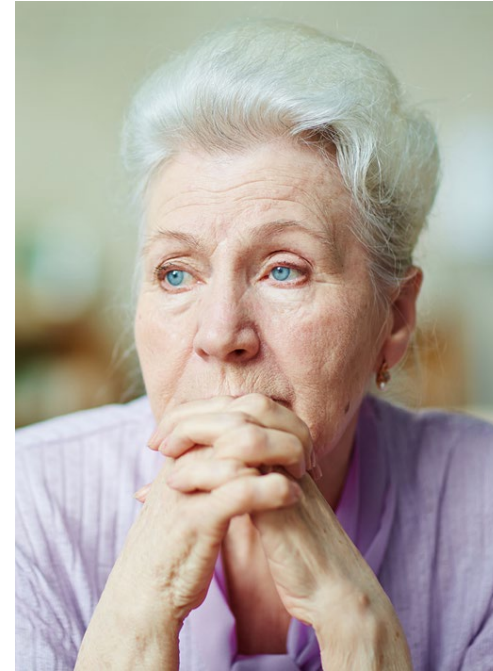


photo credit:  
<https://th.bing.com/th/id/R.49ac88765d156f1a1bb00001f29305e0?rik=Tq1oXbfD%2f2L5kQ&pid=ImgRaw&r=0>

- **Green boxes:** Explicitly endorsed by CDC's STEADI guidelines.
- **Blue boxes:** Not-explicitly endorsed by CDC's STEADI guidelines.





## Fall prevention strategies that participants described...

- “**Being careful**” was the most common strategy for fall prevention.
- “**Walking**” was a common strategy for physical activity that participants used to stay active and not fall.
- Participants had their **own fall prevention ideas**
  - Ex. Mindful practice, using furniture for stability
- Older adults were at **different Stages of Change** for specific fall prevention behaviors and topics
  - Ex. “Maintenance” for cane use outside, but at precontemplation stage for “balance exercises”

# Engagement in **personal, non-evidence-based** strategies is important for participants.

“I take extreme measures to prevent falling, let’s put it that way. I had two serious falls that injured me. I think both of them were more than a year ago now. (I’ve) not had any falls of any sort since, because I take such care to not fall. I mean, I hold onto stuff. I have a stick. I look where I'm going, I walk slowly, and [I’m] just a typical little old lady... because both times I fell was because I was hurrying and I wasn't paying attention to where my feet were.”

– **Natalie** (83 y/o female)

# Theme #2: Decisions about engagement in fall prevention strategies were influenced by multiple factors that were personal.

Casey's situation (age 73, female)

"I'm just klutzy. I've accepted it. I've embraced it. So, falling has always been a part of my life, but now that I'm older, I realize it can be really dangerous."



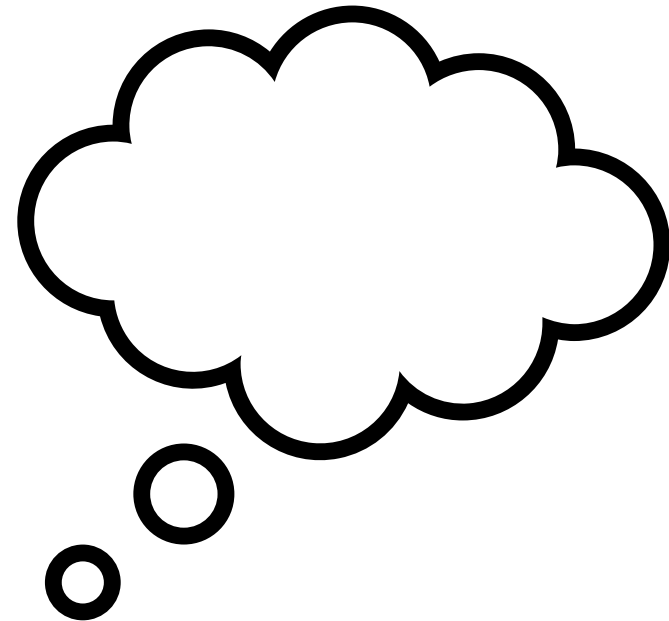


Fall prevention can be a **life-long**  
**lifestyle decision** for older people...

# Before you jump into MI, check your assumptions

## Assumptions

- Fall prevention is all common sense and easy!
- Ask yourself:
  - How long does it take for you to change your habit- eat certain things? Stress management?
- Ask yourself:
  - How do you feel about talking about your “accidents”?

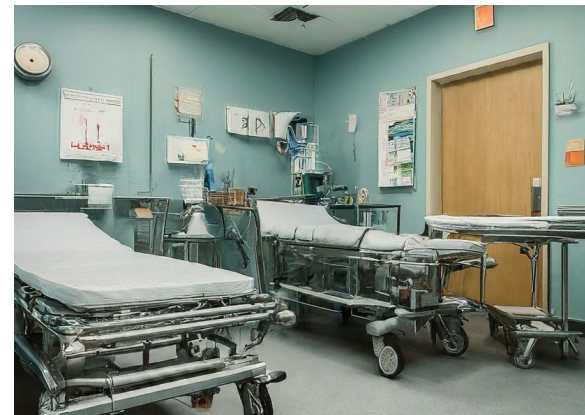


# Starting a fall prevention MI *conversation* in ED

- **Would it be ok to talk about fall prevention?** (asking for permission)
- **How do you feel about talking about fall prevention?** (O)
- **What things have you done to keep you safe?** (O)

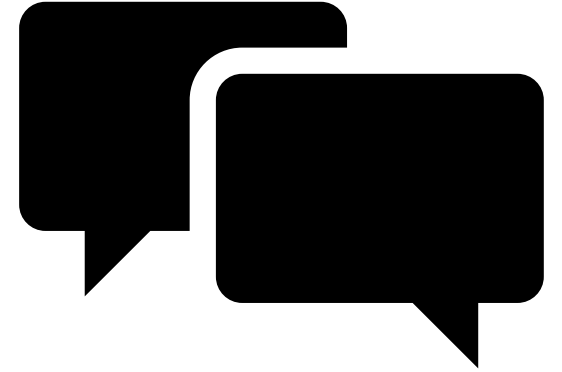


Open-ended questions, Affirmations, Reflections,  
and Summary



# Post-fall conversation

- How has this fall impacted you?
- I'm curious... can you tell me more about X?
- I wonder... what went through your mind when you had a fall?
- It seems like you are interested in X, could you share what things you have done?
- It seems like you have thought a lot about keeping yourself safe, is there anything else that you are interested in?"





# Conclusions

- **Perception and behavior barriers** exist for older adults to engage in fall prevention, and MI communication approach can address this challenge.
- Older adults value fall prevention, engaged in fall prevention in their own ways.
- MI provides supportive way to evoke new behaviors beyond resistance.
- Checking our own assumptions and conversation tips can help.

# Help spread “motivation” & “hope” to prevent falls. You are the key!



*On Monday, OHSU held its first-ever fall-prevention screening event for the public inside the lobby of the Center for Health and Healing building in Portland. (OHSU/Christine Torres Hicks)*



Introducing MI for fall prevention

School of Nursing

Community fall risk screening event

Fall Prevention Research: Exploring Patient-Centered Approaches

Applying MI for fall prevention in assisted living facilities with nursing students

# Acknowledgements

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Thank You



# MI “speak” for fall prevention

