



Mass General Brigham

# A Public Health Approach to Prevent Fall-Related Emergency Department Visits of Older Adults

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# Geriatric Falls

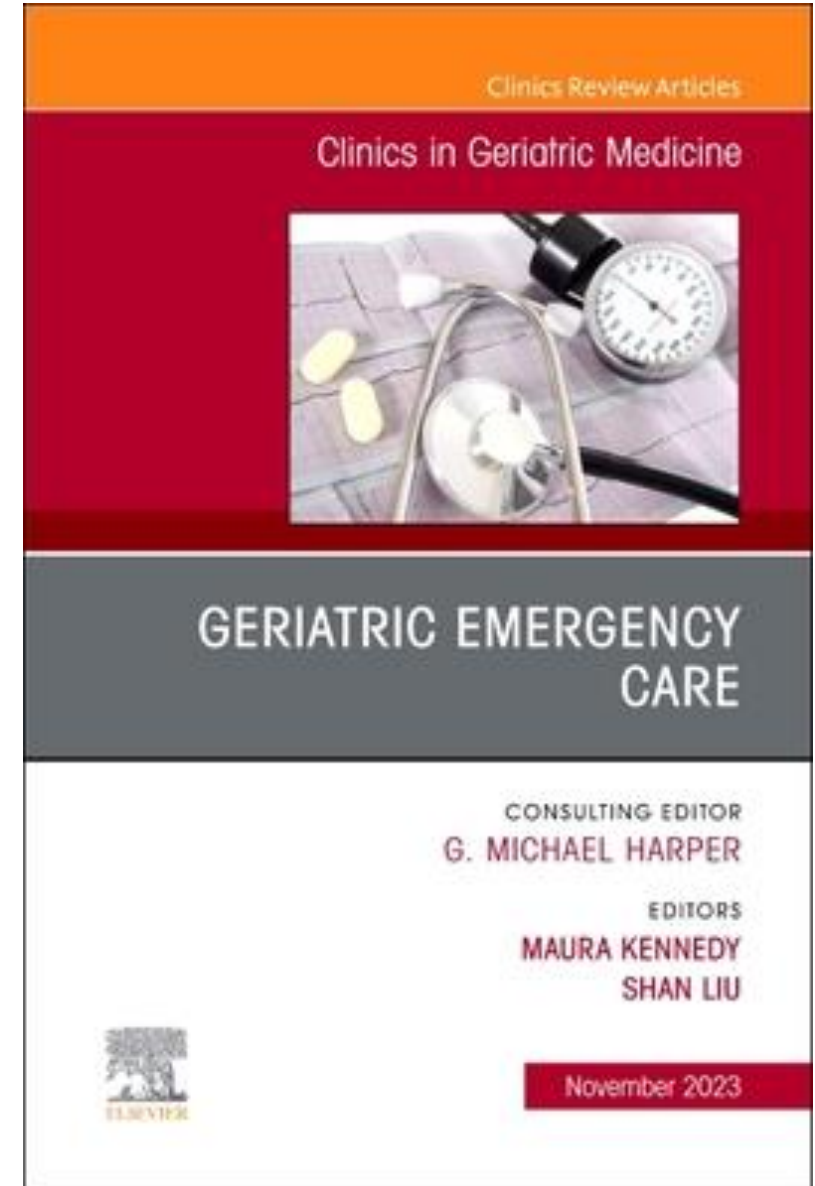
## Serious

## Sentinel Events



# Geriatric Falls

# Serious Sentinel Events

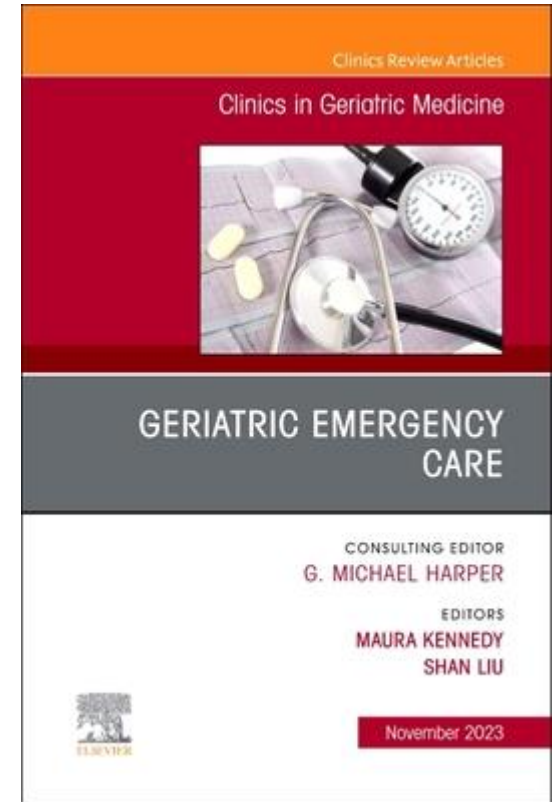


# Geriatric Falls

# Serious

# Sentinel Events

# Emergency Departments



Key takeaway – Incumbent on us to prevent the next fall – the Emergency department is an ideal location to start fall prevention



# Fall Epidemiology

- **One in every three community dwelling older adult falls annually**
- **1 million deaths annuals**
- **Approximately 3 million US ED visits**



Tinetti, 1988, CDC, Florence, JAGS 2018  
Stevens, 2006, Shankar 2017; PMC9213836/#





Every

**20 minutes**

an older adult dies from  
a fall in the US.

Many more are injured



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives, Protecting People™

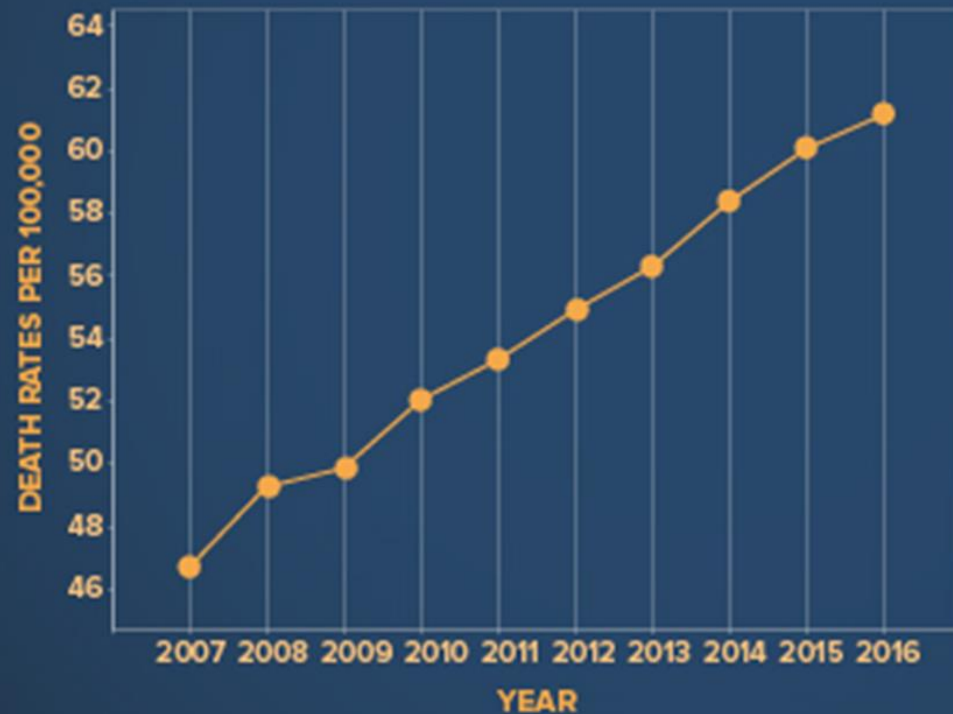
#ICEM22

**STEAD**

Stopping Elderly Accidents,  
Deaths & Injuries

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

FROM 2007 TO 2016 FOR OLDER ADULTS



If rates continue to rise,  
we can anticipate

**7 FALL  
DEATHS**  
EVERY HOUR  
BY 2030

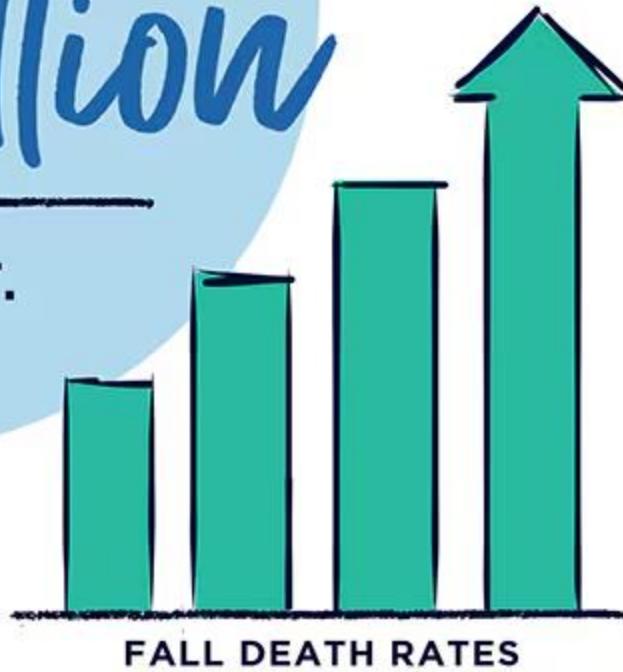
Learn more at [www.cdc.gov/HomeandRecreationalSafety](http://www.cdc.gov/HomeandRecreationalSafety).



Older adult falls cost  
the U.S. healthcare system

**\$50 Billion**

every year.



TAKE ACTION TO  
**Prevent Falls and Reduce  
Healthcare Spending.**

Learn how you can help.  
[www.cdc.gov/STEADI](http://www.cdc.gov/STEADI)

**STEADI**

[www.cdc.gov](http://www.cdc.gov)



# Geriatric Falls

## Serious

## Sentinel Events



# Geriatric Falls

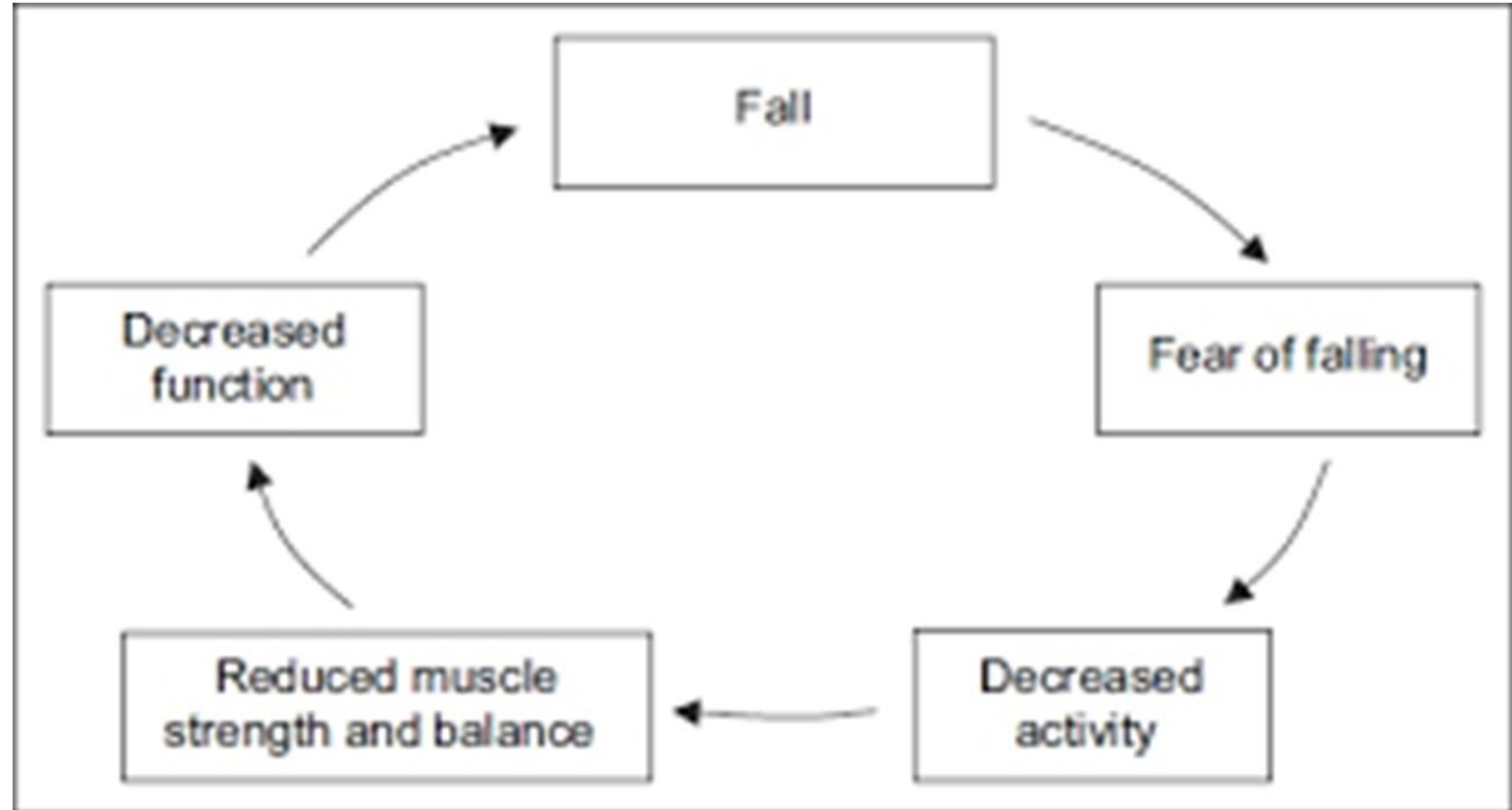
## Serious Sentinel Events

*Previous fall doubles risk of future falls*



# Geriatric Falls

## Sentinel Events



# TJC & CMS News Blog Information for Hospitals

## Falls Now Included as Sentinel Events

Jun 14, 2021 by [Barrins & Associates](#)

Related Posts: [Patient Safety](#), [Standards Compliance](#), [The Joint Commission](#)

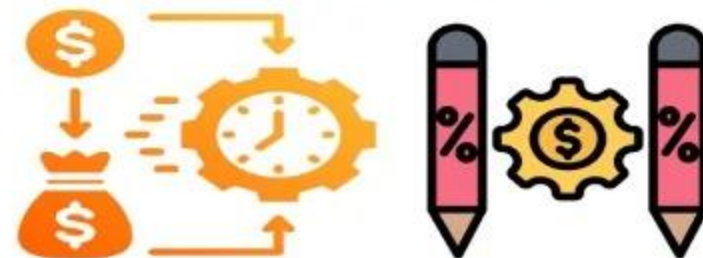




*Falls are a sentinel events that require a sentinel response*



# COST-EFFECTIVENESS





Geriatric Falls

Serious

Sentinel Events

Emergency Departments

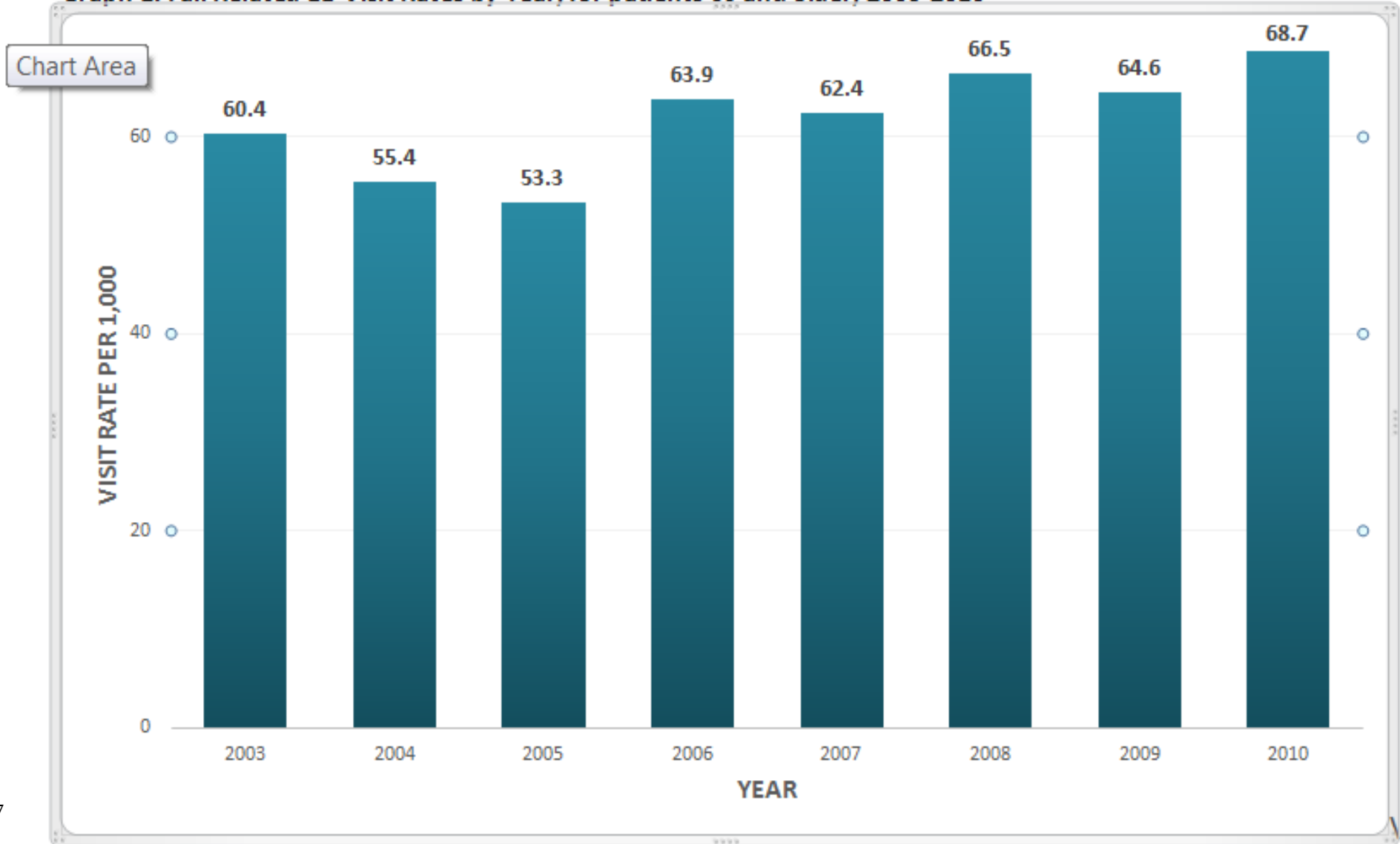


Key takeaway – Incumbent on us to prevent the next fall – the Emergency department is an ideal location to start fall prevention





**Graph 1. Fall Related ED Visit Rates by Year, for patients 65 and older, 2003-2010**







# Missed opportunities to prevent falls

N=400 patient charts

87% had modifiable risk factor

ED missed opportunities 96%

- High Risk Meds 95%
- Gait abnormality 56%
- Visual acuity 96%



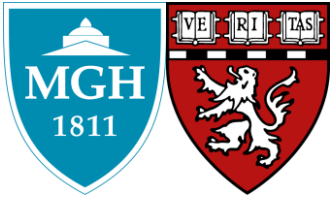
- Davenport, 2020, Ann Emerg Med



# ED fall intervention studies

- No effect:
  - Baraff, 1999 AEM
  - Shaw, BMJ 2003 –
  - Russell J Am Ger Soc 2010
- Decrease in falls:
  - Close, Profet study, Lancet 1999 – (OR 0.39 after intervention)
  - Davison, 2005 – 36% reduction in falls
  - Lesser, 2018
  - Goldberg, 2020, GAPCare– aIRR 0.34 fall ED revisit.
  - Harper 2021 Systematic Review multifactorial interventions decreased fall related injuries but not falls





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EMERGENCY MEDICINE

## What can we do?

- Identify fall risk – ED and international evaluation guidelines
- Interventions
  - ED
  - Multifactorial risk management strategy: needs multiple providers across multiple sites (Primary care, physical therapy, home safety evaluation).

## GERIATRIC EMERGENCY DEPARTMENT GUIDELINES



2010 AGS/BGS Clinical Practice Guideline:  
*Prevention of Falls in Older Persons*

Summary of Recommendations

# The Golden Hour



The time following a traumatic injury when prompt medical treatment has the highest likelihood to prevent death



## Trauma Care: The “Golden Hour” Meets the “Golden Years”

...





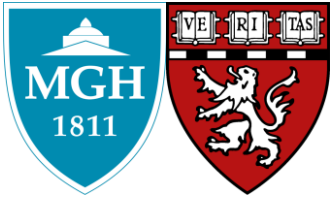
# Challenges

Time

Screening/intervention  
complicated

Do patients want  
intervention?





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EMERGENCY MEDICINE

# Solutions? Hope? Need Innovative Solutions



# Innovative Virtual Obs Unit Fall Intervention program

Multi-disciplinary

Multifactorial Assessment

Timely

Comfort of patient's home

Use of telemedicine



# Paramedics

- Paramedic visits patient next day
- Safety evaluation
- Medication system review
- Timed Up and Go test
- Emergency Physician does telemedicine visit and refers to physical therapy



Conclusion

Serious

Sentinel

ED Paradigm shift



# Thank you! Questions?



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