Older Adult Falls Research Priorities Update

NCIPC Board of Scientific Counselors Meeting
April 11, 2022

Goal:

Assess NCIPC older adult (65 years and older) fall research efforts and update the Center's Older Adult Fall Research Priorities

2015 Older Adult Falls Research Priorities

1. Measure provider and health system implementation of clinical fall prevention activities and use existing data systems to support routine reporting and evaluation.

2. Improve clinical fall prevention implementation in the primary care setting, including ensuring linkages with pharmacies and community-based prevention programs.

3. Evaluate the health benefits of conducting specific clinical fall prevention strategies (like STEADI) in healthcare settings.

Goal: (continued)

Assess NCIPC older adult fall research efforts and update the Center's Older Adult Fall Research Priorities (continued)

2015 Older Adult Falls Research Priorities

4. Estimate the cost of fall-related injuries and deaths and the economic efficiency of conducting clinical fall prevention strategies.

5. Explain the critical factors that influence changing trends in falls and fall-related injury rates among older adults.

Overall Process

- Set guiding principles and set scope
- Establish workgroup and roles
- Gather and review materials
  - Inventory of NCIPC projects
  - Landscape review
- Synthesize findings
- Draft new priorities

Guiding Principles and Scope

- Research priorities
  - Research questions under each priority
- For next 3-5 years
- Intramural and extramural projects
- Need to demonstrate progress
- Review research since establishment of priorities in 2015

Workgroup and Roles

- Key Division of Injury Prevention (DIP) participants
  - Gwen Bergen, Karin Mack, Sally Thigpen
- Workgroup
  - Division of Injury Prevention
    - Older Adult Falls-Robin Lee, Elizabeth Burns, Yara Haddad
    - Health Economics-Curtis Florence
  - NCIPC Extramural Research Program Office-Susana Panero
  - Division of Overdose Prevention-Jas Legha
  - Chronic Disease Center Healthy Aging- Chris Taylor
  - NCIPC Office of Strategy and Innovation-Gaya Myers
- Contract support from Guidehouse

Evaluation Questions

- Has CDC done enough to address the current priorities? If not, what carries over?
- How has the older adult falls landscape changed in the past 5 years? Within NCIPC? With partner organizations?
- What is public health's unique contribution to older adult falls research and programs? What is CDC's role?
- Have emerging research issues related to older adult falls surfaced? What, if anything, does CDC need to change?
- What are the current needs of the public health practice field for older adult falls activities?
- How do older adult falls' programmatic activities inform research priorities and activities? Vice-versa?

Methodology

1) Compile and analyze an inventory of NCIPC's intramural and extramural older adult falls' research publications

2) Conduct and summarize key findings from a series of interviews with older adult falls research experts, internal and external to CDC

3) Synthesize findings across the inventory, interviews, and landscape review inputs and documenting insights for updated older adult falls research priorities

Compile and Analyze: Inventory of NCIPC Projects – Intramural and Extramural Inputs for 2015-2021

- Division of Unintentional Injury Prevention (DUIP) and DIP Bibliographies
- Injury Control Research Centers (ICRC) research projects
- NCIPC Research Priorities Tracking System (RPTS)
- CDC Older Adult Falls webpage: Publications and Reports

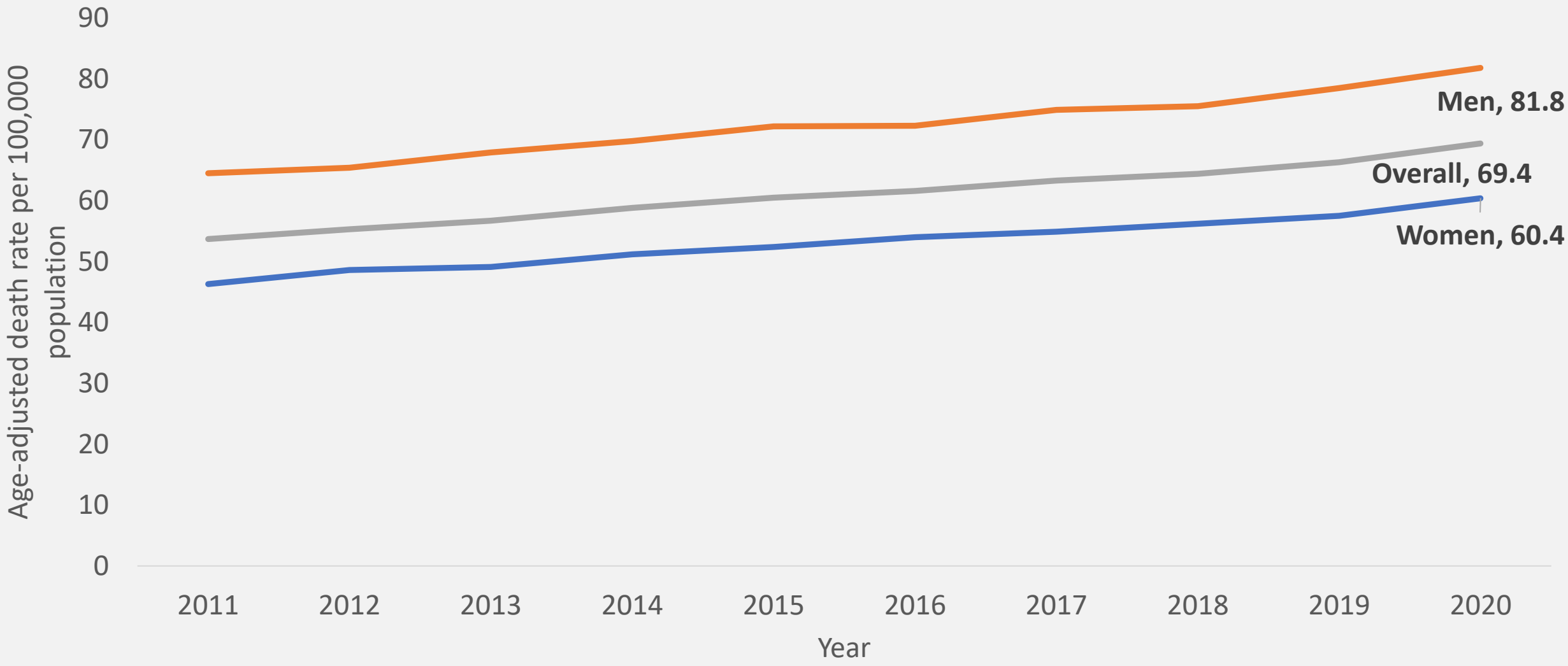
Synthesize Findings: Inventory (2015-2020)

- 147 projects/papers initially identified
- 73 left after removing duplicates, non-research

2015 Research Priority*	Extramural (n=53)	Intramural (n=36)
P1: Measure Implementation	5	4
P2: Improve Implementation	23	3
P3: Evaluate	10	11
P4: Estimate cost	1	4
P5: Changing trends	14	14

*Research activities may address more than one research priority.

Age-adjusted fall death rates by sex for adults aged 65 years and older ,National Vital Statistics System, 2011-2020



Synthesize Findings: Inventory – Key Findings

- Limited intramural research on improving implementation (Priority 2)
- More efficacy (Priority 3) and cost effectiveness (Priority 4) would benefit the field
- Limited research on disproportionately affected persons across all priorities

Conduct and Summarize: Interviews with key SMEs

External SMEs

- American Geriatric Society
- National Council on Aging
- National Association of State Emergency Medical Services Officials
- John A Hartford Foundation
- American College of Emergency Physicians
- Injury Prevention Research Center director
- Pharmacist
- Geriatrician
- Physical Therapist

Health and Human Services SMEs

- CDC Unintentional Injury
- CDC Chronic Diseases Healthy Aging
- Indian Health Service
- Centers for Medicare & Medicaid Services

Conduct and Summarize: Interviews with Key SMEs – Key Findings

1. Identify and evaluate effective prevention strategies outside the clinical setting
2. Improve understanding of older adult falls as a chronic condition
3. Apply health equity lens to older adult falls research
4. Enhance research infrastructure and data
5. Improve falls assessment and identification in high-risk populations

Synthesize Findings: Landscape Review – Key Findings

- Other federal agencies
  - Inpatient/nursing home fall prevention research
  - Biological causes of falls research
  - Health system delivered interventions
  - Targeted populations
- CDC's unique federal role
  - Clinical role in fall prevention
  - Fall prevention in Community dwelling adults
  - Opportunities for dissemination and implementation

Proposed New Priorities (1)

1. Describe the risk and protective factors associated with changing trends in falls and fall-related injury rates among older adults with an emphasis on groups which may be disproportionately affected.

1. What risk and protective factors explain the differences in fall and fall injury rates, and injury severity among different groups of older adults?
2. How does type of injury (e.g. TBI), and injury severity from a fall differ among groups of older adults?
3. What risk and protective factors are associated with specific types of fall injuries (e.g. traumatic brain injuries, hip fractures)?
4. What are the unique risk and protective factors (e.g., alcohol use, access to care) for populations at higher risk for falls and fall injury (e.g., AI/AN persons, people residing in rural areas)?

Proposed New Priorities (2)

2. Improve the likelihood that older adults receive clinical fall prevention care (e.g., screening, assessment and intervention) at least once a year.

1. What are the most effective clinical strategies for preventing falls and fall risk?
2. What are the most cost-effective methods of implementing STEADI in healthcare settings?
3. How can STEADI (i.e., falls screening, assessment and intervention) be more broadly adopted in different healthcare settings (outpatient, inpatient, pharmacies, physical therapy)?
4. What are the best strategies for increasing clinical fall prevention efforts with emphases on older adults who are disproportionately affected by falls (e.g., AI/AN elders, rural older adults)?

Proposed New Priorities (3a)

3. Implement and evaluate effective strategies for linking clinical and community-based fall prevention.

1. How can community organizations best partner with health systems to implement the core components of STEADI (e.g., screening, assessment, and intervention) in a cost-effective manner?
2. What are the most effective methods to motivate community organizations to link with clinical systems for older adult fall prevention?

Proposed New Priorities (3b)

3. Implement and evaluate effective strategies for linking clinical and community-based fall prevention (continued)

3. How can clinical and community linkages for fall prevention be tailored to best serve the needs of disproportionately affected older adults?
4. What payment models (e.g., CMS Alternative Payment Models) motivate the integration of clinical and community-based fall prevention?

Proposed New Priorities (4a)

4. Understand the knowledge, attitudes and behaviors that motivate older adults to adopt clinically-recommended fall prevention strategies.

1. What individual, relationship, community, and societal factors serve as barriers and facilitators to older adults', especially disproportionately affected ones, willingness to adopt their healthcare provider's recommended fall prevention plan of care?

2. How can community-clinical linkages for fall prevention best be structured to reduce older adults' barriers to participating in prevention strategies?

Proposed New Priorities (4b)

4. Understand the knowledge, attitudes and behaviors that motivate older adults to adopt clinically-recommended fall prevention strategies. (continued)

3. What are the most effective science and theory-based tools (including promotional messages) for educating and encouraging older adults, especially disproportionately affected persons, and caregivers to prevent fall injuries as they age?

Thank you!

Discussion

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.