Fall Prevention Performance Improvement in the PACE Setting

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InovaCares for Seniors PACE
Fairfax, VA
Presentation Objectives

- Introductions
- Falls Statistics
- PACE Area Statistics
- Evidenced Based Fall Prevention Programs
- PACE Implementation of Falls Prevention
  - SAIL, MOB
  - Falls Team
  - Initial Home Evaluation
  - Home Safety Checklist
  - Diagnosis Specific Recommendations
- Trends at the InovaCares for Seniors PACE Program
- Trends at PACE Facilities Across the Nation
PACE Participant Fun Facts – Gender Breakdown

- Women: 74%
- Men: 26%
PACE Participant Fun Facts – Caregiver Support

- Living alone: 20%
- Living with a caregiver: 85%
- Living in SNF: 3%
- Living with non-caregivers: 5%

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PACE Participant Fun Facts – Marital Status

- Married: 21%
- Divorced: 19%
- Single: 10%
- Separated: 5%
- Widowed: 21%
PACE Participant Fun Facts – Age Breakdown

- 75-84: 30%
- 85-94: 26%
- 55-64: 15%
- 65-74: 24%
- >95: 0.3%
PACE Participant Fun Facts – Ethnicity

- Caucasian: 45%
- Asian: 17%
- Black or African-American: 23%
- Hispanic or Latino: 11%
- Other: 4%
Cultural Diversity
I was Born in … the USA (and everywhere else!)

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Falls
Why Should We Care About Falls?

- 20-30% of falls result in injuries that are classified as moderate to severe.
- Side effects can result in rhabdomyolysis, pressure ulcers, or dehydration if “long lie” occurs.
- Falls result in fractures increasing hospital stays, loss of independence and often results in admission to LTC facilities.
- 1/5 of older persons who experience a hip fracture from a fall will die within a year due to complications from their injury.¹
- In 2014, 33,018 persons died as the result of falls, 16.5% of all injury deaths. The age-adjusted death rate for falls increased 3.4%, from 8.8 in 2013 to 9.1 in 2014. The overwhelming majority of fall-related deaths (96.8%) were unintentional.²
National Falls Statistics

- Over 800,000 patients per year are hospitalized due to fall injury most often due to head injury or hip fracture.\(^3\)

- Medical costs for falls total (adjusted for inflation) are $31 billion annually.\(^3\)

- More than 1 out of 4 of those 65 and older experience a fall each year, but less than half inform their care providers. After a single fall, your chance of falling again is doubled.\(^4\)
Falls in older persons are the leading cause of death and injury in the United States and are increasing annually.\textsuperscript{5}
### Deaths by Year and Mechanism

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<td>161</td>
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<td>Injury Deaths</td>
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<td>Population</td>
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<td>Years of Potential Life Lost</td>
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### Injury Hospitalizations by Year and Mechanism

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<tr>
<td>Injury Hospitalizations</td>
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<tr>
<td>Population</td>
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<tr>
<td>Hospitalization Rate</td>
<td>387,460</td>
<td>450,300</td>
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Evidenced Based Falls Prevention Programs

- CAPABLE
- Enhance Fitness
- FallsTalk
- FallScape
- Fit & Strong!
- Healthy Steps for Older Adults
- **Matter of Balance**
- The Otago Exercise Program
- **Stay Active and Independent for Life (SAIL)**
- Stepping On
- Tai Chi for Arthritis
- Tai Ji Quan: Moving for Better Balance
- YMCA Moving for Better Balance

National Council on Aging
Evidenced Based Falls Prevention Programs

- Matter of Balance – an 8 week program that focuses on fear of falling and personally identifiable strategies to increase activity levels which includes realistic goal setting, environmental changes to reduce fall risk, and exercises for balance, strength and coordination.

- SAIL – Stay Active and Independent for Life – is a strength, balance, and fitness program for older persons aged 65+. Primarily targeted to community dwelling adults or those with a falls history. It is offered 3x/week for a one hour class. Exercises can be modified for standing or sitting.
Evidenced Based Falls Prevention Programs

THE SOLUTION: Proven Community-Based Programs

**A Matter of Balance**
8-session workshop to reduce fear of falling and increase activity among older adults in the community
- 97% of participants feel more comfortable talking about their fear of falling
- 99% of participants plan to continue exercising
- $938 savings in unplanned medical costs per Medicare beneficiary

**Otago Exercise Program**
Individual program of muscle strengthening and balance exercises prescribed by a physical therapist for frail older adults living at home (aged 80+)
- 35% reduction in falls rate
- $429 net benefit per participant
- 127% ROI**

**Stepping On**
7-week program that offers older adults living in the community proven strategies to reduce falls and increase self-confidence
- 30% reduction in falls rate
- $134 net benefit per participant
- 64% ROI

**Tai Chi: Moving for Better Balance***
Balance and gait training program of controlled movements for older adults and people with balance disorders
- 55% reduction in falls rate
- $530 net benefit per participant
- 509% ROI

Sources:

Learn more about these and other proven programs at [ncoa.org/FallsPrevention](http://ncoa.org/FallsPrevention)

* Net benefit = Direct medical costs averted (e.g., emergency department visits, hospitalizations, rehab, homecare) after subtracting intervention costs
** ROI (return on investment) = Net benefit per participant divided by average cost of the program per participant, percentage of return for each dollar invested
*** Now known as “Tai Ji Quan: Moving for Better Balance”
Enrollment

- OT visits the home and looks at environmental hazards and ADL capability and makes recommendations for accessibility and safety. PACE provides recommended equipment and the family installs it.
- Nursing does MAHC 10 and medication review.
- PT performs balance, coordination, mobility and standardized assessments (BERG, TUG, Gait Speed).
After Joining

- Fall risk is identified to PACE staff with stars (blue = fall risk, red = needs assist with mobility).
- On going education is given to families and participants regarding the importance of notifying PACE immediately post fall.
Ongoing as a PACE Participant

- Staff education regarding environmental clutter and participant bags on the floor
- Designated parking area for wheelchairs and walkers (challenging)
- Ongoing fall prevention education during participant council (monthly)
- Fall prevention programs (SAIL, MOB)
- Targeted medication review by Pharmacist (As Needed)
Strategies to Consider

- Bifocals are not always recommended
- Cataract Surgery is not always indicated for participants with dementia
- Assess for appropriate mobility device
- Highlighting stairs, vision/balance challenges for those with dementia
- Footwear/sensation & proprioception assessment
- Smaller space for participant’s with dementia
- Benefit vs. risk of continued ambulation versus wheelchair usage
- Placement/storage of assistive devices in participant’s rooms
Fall Risk Criteria Identified

- Falls Risk identified by a blue star on participant name tags.
- Participant must meet at least 2 of 3 inclusions:
  - Berg balance score of 40 or below or MAHC 10 score of 4 or more
  - History of falls within last quarter
  - Cognitive impairment or history of impaired judgement/safety awareness/MMSE of 23 or lower

*Therapists reserve the right to include other participants based on their professional judgement.*
Falls Prevention Team

- Members: PCP, RN, OT, PT, QAPI
- Review each fall case weekly as a team
- Appropriate discipline assesses reasons/risks/modifications for falls
- Brainstorm and implement solutions as a team
- Ensure that caregiver education and partnership is involved in strategies
- Fall report submitted to QAPI during meeting for HPMS reporting
INOVACares for Seniors PACE Trends

Falls Per 100 Members/Month (2017)

- JAN: 30
- FEB: 25
- MAR: 30
- APR: 25
- MAY: 30
- JUN: 30
- JUL: 25
- AUG: 25
- SEPT: 15

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INOVACares for Seniors PACE Trends

Falls 2017 by Location

- Falls at center
- Falls at home
- Nursing center fall
- Assisted Living center fall
- Van Transportation fall
- Other
INOVACares for Seniors PACE Trends

Falls 2017 by Level

- Level I
- Level II
- Level III
- Level IV
- Level V
## Fall Tracking Summary 2017
**InovaCares for Seniors PACE**

<table>
<thead>
<tr>
<th>Summary</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>Q1</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
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<td>Total Falls</td>
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<td>30</td>
<td>39</td>
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<td>27</td>
<td>35</td>
<td>41</td>
<td>103</td>
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<td>Total # Participants who fell in Month/Quarter/Year</td>
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<td>21</td>
<td>21</td>
<td>48</td>
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<td>25</td>
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<td>Total Falls that were PACE 1st fall</td>
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<td>7</td>
<td>6</td>
<td>16</td>
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<td>13</td>
<td>32</td>
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<td>% Falls where Orthostatic B/P completed as intervention</td>
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<td>53%</td>
<td>59%</td>
<td>48%</td>
<td>41%</td>
<td>51%</td>
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### Outcomes

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### Location

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Larger programs with smaller numbers of falls.

Scatterplot
Falls vs Program Size

Source: PACE Data 2017
Fall Correlation with Medication Error Occurrence (National PACE Data)

Source: PACE Data 2017
We All Have a Role to Play!

QUESTIONS/COMMENTS?
References


Slide 8: Map Graphic: https://www.amcharts.com/visited_countries/