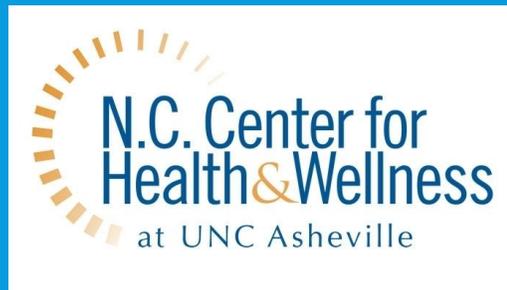




**HEALTHY AGING NC**

# How to Incorporate Evidence-Based Programs for Better Outcomes



# CHRONIC DISEASE, FALLS, AND DISABILITIES

As we age, we are at a higher risk for chronic disease and for falling, and they both affect one another:

de Mettelinghe, Cambier, Calders & Delbaere (2013): Diabetes is a major risk factor for falling, even after controlling for poor balance. Taking more medications, poorer walking performance and reduced cognitive functioning were mediators of the relationship between diabetes and falls.

Thompson, McCormick, & Kagan (2006): Falls are the leading cause of TBI for older adults (51%), and motor vehicle traffic crashes are second (9%). Older age is known to negatively influence outcome after TBI.

Lawlor, Patel, & Ebrahim (2003): Circulatory disease, chronic obstructive pulmonary disease, depression, and arthritis were all associated with an increased odds of falling

CDC STEADI: What conditions make you more likely to fall? They include: lower body weakness, Vitamin D deficiency, use of medicines, vision problems, foot pain...

Other factors: Medications, muscular strength, mobility limitations, interference with daily activities

# CHRONIC DISEASE, FALLS, AND DISABILITIES



According to the CDC, 22% of adults in the U.S. have some type of disability:

- 13.0% Mobility
- 10.6% Cognition
- 6.5% Independent Living
- 4.6% Vision
- 3.6% Self-Care

- Adults living with disabilities are more likely to:
  - Be obese 38%
  - Smoke 30%
  - Have high blood pressure 42%
  - Be inactive 36%
- Adults living with disabilities are 3x more likely to have heart disease, stroke, diabetes, or cancer

# WHAT ARE “EVIDENCE-BASED PROGRAMS”?

## **Solid Research:**

- EBPs are based on rigorous study of the effects or outcomes of specific interventions or model programs.
- They demonstrate reliable and consistently positive changes in important health-related and functional measures.

## **Packaged Programs:**

- Tested model programs are translated into a packaged program with a variety of supportive materials. Packages usually include implementation manuals and specialized training.
- As a result, the program’s content and fidelity will be consistent in all settings, and it will be easy to deliver.

# FALL PREVENTION EVIDENCE-BASED PROGRAMS

- Matter of Balance
- Otago
- Tai Chi: Moving for Better Balance
- Building Better Balance Screenings

# 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:

Çarande-Kulis, V., Stevens, J., Florence, C., Beattie, B.L., Arias, I. (2015). A cost-benefit analysis of three older adult falls prevention interventions. *Journal of Safety Research*, 52, 66-70.

Report to Congress in November 2013: The Centers for Medicare & Medicaid Services' Evaluation of Community-based Wellness and Prevention Programs under Section 4202 (b) of the Affordable Care Act. <http://innovation.cms.gov/Files/reports/CommunityWellnessRTC.pdf>



## Falls Free®

National Council on Aging

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"

# OUTCOMES

- Decrease in falls and fall-related injuries
- Less utilization of EMS and ED
- Tremendous health care cost savings
- Empowerment for caregivers and family members
- Increased quality of life for NC older adults

# QUESTIONS?

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# CHRONIC DISEASE EVIDENCE-BASED PROGRAMS

- Chronic Disease Self Management Program
- Diabetes Self Management Program
- Chronic Pain Self-Management Program
- Tomando

# CDSME OVERVIEW

- 2 ½ hours once a week for 6 weeks
- Led by 2 trained leaders
- Focus on skills and support
- Subjects include:
  - 1) techniques to deal with frustration, fatigue, lack of sleep, and pain,
  - 2) appropriate exercise for improving strength, flexibility, and endurance,
  - 3) appropriate use of medications,
  - 4) communicating effectively with family, friends, and health professionals,
  - 5) nutrition,
  - 6) decision making and action planning

# OUTCOMES

## Research Shows That Participants...

- Increase their levels of physical activity.
- Develop better coping strategies and symptom management.
- Show better communication with their physicians.
- Improve their self-rated health and social/role activities.
- Experience less health distress.
- Have less fatigue.
- Experience decreased disability.
- Have lower numbers of physician visits and hospitalizations.

# QUESTIONS?

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To learn more, please visit:

[www.healthyagingnc.com](http://www.healthyagingnc.com)

for program descriptions, times, and locations



