



Community Health Foundation
of Western & Central New York

Falls Prevention – Summary of the WNY Collaborative

WNY
Falls Prevention
STEP UP TO STOP FALLS



The importance of falls

- One of three people over 65 year old falls each year
- One of ten falls results in injury requiring hospital care
- For those with injury most take a year to recover and many never return home
- Falls are the leading cause of injury-related deaths for older adults



Falls are Preventable

- Many of the causes of falls can be identified in advance
 - *Balance and mobility problems*
 - *Medications*
 - *Home safety hazards*
 - *Vision impairment*
- Once identified, multi-dimensional approaches are more effective



WNY Falls Prevention Consortium

- Consortium came together in 2007
- Established four work groups
 - *Community Resources Work Group*
 - *Measurement and Evaluation Work Group*
 - *Screening and Evaluation Work Group*
 - *Community Education Work Group*



Initial Work of the Consortium

- **Community Resources** work group conducted a survey of local providers to identify current services and needs
- **Measurement** work group identified local data and options for measuring success
- **Assessment** work group developed screening tool and assessment tool
- **Education** work group developed self-management tool



Strategic Intent for Falls Prevention

Coordinated approaches to reduce the number and impact of falls affecting older adults in WNY.

Focus on **prevention** and maintaining independence in the community.

Use **broad goals** under a single collective initiative. . . **flexible** to fit a variety of settings and populations.

Target **older adults who are at risk for falls**. And . . . aim at **professional** understanding about falls risk and assessment.

Long-term **reach all** older adults . . . **start with specific populations** where the impact can be significant and measured.



Measures of Success

- Reduction in falls and falls with injury
- People who work with seniors understand falls risks and how to screen older adults for falls risk
- Professionals know how to assess falls risks
- Individuals participate in falls prevention and are able to assess falls risks and know how to reduce risks
- Individuals work on mobility, balance and strength have fewer falls.

Erie County – Annual data for people over 65

- 5,149 people are treated and released in emergency rooms
- 2,975 people are hospitalized for fall-related injuries
- 45 people die each year from a fall injury
- Total costs of care: \$150.7 million per year
- Based on national ratios – 81,240 people fall each year

Source: NYS DOH from yrs 2003-2005

Where do older people fall in Erie county?

- Those who require care in emergency depts
 - *Most fall at home (1/3)*
 - *Others fall in a wide range of community settings*
 - *As they age, more fall in residential settings*
- Those who require inpatient care
 - *Most fall at home (2/3)*
 - *Next largest group fall in residential settings*

Falls Prevention Resources and Needs Survey 2008 (n=23)

- Current approaches:
 - Education for self-assessment and self-management
 - Falls prevention counseling to address risk factors
- Assessment tools used:
 - Tinetti Balance Assessment
 - BERG Balance Test
 - Timed Up and Go (TUG)
- Risks for falling
 - Poor balance
 - Environmental issues
 - Medications
- Consequences of falls
 - Fractures
 - Fear of falling
 - Reduced activity
- Barriers preventing individuals from taking precautions to prevent falls
 - lack of awareness of risk
 - lack of information regarding available services

Falls Prevention Resources and Needs Survey 2008 (cont.)

- Most common falls prevention services:
 - gait and balance assessments
 - home safety assessments
 - balance and mobility training
- Services lacking:
 - follow-up case management following falls not resulting in a fracture
 - culturally competent falls prevention services
- Suggestions:
 - Education
 - Intervention options
 - Easy access to information, evaluation and intervention
 - Avoiding duplication of falls prevention services
 - Public education on falls prevention services

National *Falls Free* Action Plan as the basis for the WNY Plan

- Core Goals

- *Physical Mobility*

- *Medications and Medical Management*

- *Home Safety*

- *Community – external environment and public policy*

- Personal and Professional Approaches to increase knowledge and change behavior

- See the WNY Falls Prevention Plan at

- www.chfwcny.org



WNY Falls Prevention Collaborative Goals

- Help older adults continue to live safely in the community
- Defer frailty associated with falls and fear of falling



WNY Falls Prevention Collaborative

- Test implementation approaches with the idea to identify the best approaches to encourage others to use across the community
 - *Community-focused teams: self-assessment and self-management applications.*
 - *Professionally-focused teams: professional practice in targeted settings such as housing, home care, primary care or other settings working with community-based older adults.*
- Measurable results to direct future spread



How does a Collaborative Work?

- The work process at the Learning Sessions is guided to help teams apply proven change techniques to their work
- The process is highly interactive and teams have time to learn new skills and to apply them to their projects
- The tools for change come from QI and can be used for many other purposes

WNY Falls Prevention Collaborative

- **AfterCare Nursing Services** and Erie County Community College, Nursing
- **Cont. Care Div. of Catholic Health System - Sr Services** and American Red Cross
- **D'Youville College, Occup. Therapy** and Catholic Charities
- **Erie County Dept of Senior Services**, Independent Health, and Willcare Home Health
- **Geriatric Center of WNY** and Kaleida Health Rehabilitation
- **Learning Partners** and The Greenfields of Niagara Lutheran
- **McAuley Seton Home Care**
- **People, Inc.** and D'Youville College Physical Therapy
- **Occupational Therapy Dept of the UB Dept of Rehabilitation**
- **Ray Hammel Physical Therapy** (Buffalo Rehab) and Stall Geriatrics
- **The Center for Industrial Effectiveness (UB)**, UB Dept of Rehab Science, and Dept of Veterans Administration
- **Wellness Institute of Greater** (City of Buffalo)

Developed the *Step Up to Stop Falls*[™] Tool Kit

- Binder with short summaries of each item
- Flash Drive
 - *Leader guides, instructions, tools for implementation*
 - *Recommended office practice procedures*
 - *Home care intervention models*
 - *Assessment guidelines*
 - *Team Summary Reports 2009-2010 WNY Collaborative*

[By Fall - this will be posted on a website for reference]



Professional and Student Education Components

- Primary Care Quick Guide
- Primary Care Treatment Interventions
- Stand Up for Yourself - Patient Guide
- Falls Prevention Digital Data Interface Form
- Falls Prevention Screening and Competency Assessment
- DVD - Interdisciplinary Falls Prevention Student Education

The Geriatric Center of Western New York - Kaleida

Overall goal

- Create and implement a falls prevention program for patients over the age of seventy and at risk for falling
- Increase seniors and their caregiver's awareness of risk of falling through a multi disciplinary assessment and implement an intervention to reduce risk for falls

The Geriatric Center of Western New York - Kaleida

Successes

- GeriMedCard proved useful-easy access to medical information
- Social check in program well received
- Physical Therapy evaluations and explanation of results
- Tai Chi Workshop and DVD



Toolkit Components

- Primary Care Quick Guide
- Primary Care Treatment Interventions
- Stand Up for Yourself – Patient Guide



Ray Hammel Physical Therapy, PLLC *Stall Geriatrics, LLC*

Overall goals

- Create cost effective methodology for professional fall risk screening
- Develop data entry/analysis method for individualized recommendations and tracking
- Demonstrate an outcomes-based preventive falls screening & tracking system that is sustainable, cost-effective, efficacious, and socially responsible




Ray Hammel Physical Therapy, PLLC

Stall Geriatrics, LLC

Successes

- A working web-based interface was developed from scratch
- Reduced rate of falling and relatively high rate of adherence to action plans was achieved
- Multi-media educational material has been developed to demonstrate methodology of screening procedures for falls prevention



Ray Hammel Physical Therapy, PLLC *Stall Geriatrics, LLC*

Measurement

- Reduced falls from a rate of 9.75 at start of program to 4.42 at six month follow-up which is roughly a 50% reduction in falls



Toolkit Component

- **Falls Prevention Digital Data Interface Form**



Learning Partners/GreenField

Team Goals

- 1. Develop an evidence-based, field tested Train-the-Trainer toolkit and program for health care providers of community-dwelling older adults in Western New York to increase identification of fall risks through improved screening/assessment/interventions/referrals as indicated.
- 2. Provide education/training seminars for falls prevention risk factor identification, assessment, intervention, and referral to providers

Learnings

- Therapists do not systematically document information related to falls or falls risks
- Older adults and family members need and want more information about fall risk factors and prevention
- Learned that older adults who have not fallen do not consider themselves as “at-risk” for falls
- Learned that provision of education and training is successful in demonstrating evidence of learning in therapists as indicated by pre/post test changes



Highlights and Outcomes

- All therapists gained competency in Timed up and Go, Single Leg Stance, and Tai Chi Walking
- All participants reported improved confidence in their ability to perform falls risk assessments
- All therapist improved their knowledge of falls risk and falls prevalence in older adults.



Toolkit Component

- Falls Prevention Screening and Competency Testing



D'Youville College PT, OT and Nursing Departments

Team Goals

1. To graduate health professional students who are trained to offer a falls prevention program to community dwelling elders and who embrace the concept of using an interprofessional approach to falls prevention.
2. To educate case/building managers on how to enable community elders to reduce falls risk.
3. To reduce the number of falls in community dwelling elders through an interprofessional program for falls prevention.



D'Youville College PT, OT and Nursing Departments

Learnings

- Older Adults tend to minimize the existence of home hazards
- Older Adults struggle to provide an accurate picture of current medications
- Students enjoy working directly with older adults in this capacity
- There is great value in bringing together students of different disciplines



Toolkit Component

- Interprofessional Falls Prevention Student Education DVD



Community Education Components

- Home Safety Self Assessment Tool (HSSAT)
- Safety Education and Falls Education (SAFE) Manual
- For Older Adults – Exercises to Improve Balance and Mobility – SAFE Portion
- EMT/First Responder Falls Prevention Education
- For Older Adults – Exercises to Improve Balance and Mobility: Tai Chi Portion
- Otago Exercise Programme



UB Occupational Therapy Geriatric Group

- Team Aims:
 - *Develop educational tool to make homes safer*
 - *Disseminate the tool among community dwelling older adults*
 - *Emphasize the importance of use of tool among occupational therapists*



UB OT Successes

- *Developed an inexpensive, evidence based tool to make homes safer*
- *Reduced home hazards 58% per client*
- *Educated 560 older adults and 343 health professionals*
- *Demonstrated education alone can be an effective tool for reducing falls*

Catholic Health - Continuing Care Division

■ Team Aims:

- *Test participants using TUG*
- *Participants will make home environments safer and change health habits*
- *Demonstrate reduced fear of falling*
- *Demonstrate decreased fall risk using TUG*

Catholic Health - Continuing Care Division

■ Process:

- *Conducted community education sessions in 7 locations to 120 people*
- *Conducted 8 week sessions in 4 locations using exercise and education*

Catholic Health - Continuing Care Division

- Successes:
 - *Fall Risk reduced in 77% of participants*
 - *100% of participants made health/environmental challenges to reduce risk*
 - *54.5% reduced their fear of falling*
 - *Created manual for volunteers to use as well as video for use in centers by volunteers*



Toolkit Component

- Safety Assessment and Falls Education (SAFE) Manual
- DVD – To Improve Balance and Mobility in Older Adults

Wellness Institute of Greater Buffalo and WNY, Inc.

- Team Aims:

- *Institutionalize falls preventions into the cultures of three organizations:*

- **Buffalo Fire Dept.**
 - **Buffalo Seniors Dept**
 - **The Wellness Institute**



Wellness Institute of Greater Buffalo and WNY, Inc.

- Successes:
 - *40 fire fighters received advanced medical training*
 - *40 city youth trained in Fire dept's summer employment program*
 - *10,000 CDC falls prevention booklets distributed*
 - *Developed and disseminated fall prevention literature in new locations throughout the community*



Toolkit Component

- EMT/First Responder Falls Prevention Education Program



The Center for Industrial Effectiveness

Overall goal

To determine the educational tools and the amount of training necessary to influence fall risk screening, assessment, and intervention for a multidisciplinary approach to fall prevention



The Center for Industrial Effectiveness

Successes

Creation of training material for class leaders and volunteers for an evidence based fall prevention exercise program incorporating sensory and motor aspects of balance

The Center for Industrial Effectiveness

Measurement

- Participants felt exercise class was helpful.
- Statistically Significant Change in :
 - *Activities-specific Balance Confidence Scale*
 - *Functional Reach*
 - *Number of Falls*



Toolkit Component

Home Based Primary Care Exercise Program



People Inc./ D'Youville College

Team Goals

1. Day Hab: To determine the effectiveness of a modified Tai chi/qigong exercise program on the incidence of falls and behavior incidents among participants in a Day Habilitation setting for people with developmental disabilities.
2. Senior Housing: To determine if residents of senior housing could safely engage in a modified Tai chi/qigong exercise program with minimal instruction from instructor.



People Inc./ D'Youville College

Learnings

- The use of Tai chi/qigong in adult day habilitation sites had an unexpectedly successful impact on the behaviors of this population
- Older Adults used this intervention to create social connections within senior housing, exercising in groups rather than alone.



People Inc./ D'Youville College

Outcomes

Day Hab:

- At the site using both daily Tai Chi/Qigong interventions falls improved by 32.5%

Senior Housing

- 23% reported increased energy
- 18% Improved sense of well being



Toolkit Item

- For Older Adults – Exercises to Improve Balance and Mobility: Tai Chi Portion



Erie County Senior Services

- Otago Exercise Programme

Our Team

- **Cheryl Aaron, PT, DPT, CWS**

- *Rehab Director; Willcare*

- **JoAnn Calandra, RN, BSN, CCM**

- *Clinical Administrator, Special Populations; Independent Health*

- **Diane Oyler, Ph.D.**

- *Research Analyst; Erie County Department of Senior Services*

- **Pat Watson, LMSW**

- *Supervisor of Case Management Services; Erie County Department of Senior Services*



Why This Group of Partners?

Erie County Department of Senior Services

- *Over 50 case managers serve 4,000 home-bound seniors every year, linking clients to services such as home care, adult day care, home delivered meals, and financial benefits*
- *Our goal: promote the optimal well being of older adults by empowering them to lead lives of independence, health, and dignity.*
- *Reducing falls and strengthening this very frail population adds quality time to their lives.*

Willcare

- **Provides a full range of therapies to patients confined to their home with Medicare or other insurance coverage.**
- **Can bill Medicare for coverage of treatment offered in the home.**



Independent Health

- **Insures many frail, homebound people with high medical costs.**
- **Could a program like this help reduce health care costs of a very frail population?**



What Were Our Goals?

- **Reduce fall risk for frail homebound elderly**
- **Improve quality of life**
- **Prolong independence**

What Did We Do?

- **O**btained evidence based OTAGO Exercise Programme
- **T**rained Case Managers how to identify appropriate client
- **A**ssigned clients to Willcare for intervention by PTs
- **G**athered data on client progress through program
- **O**utcomes were assessed

Who Were The Clients?

- **Average Age: 83**
- **Average ADL deficits: 2**
- **Average IADL deficits: 5**
- **“Medical Train Wrecks”**
 - **Impaired Ambulation**
 - **Parkinson’s**
 - **History of Strokes**
 - **Arthritis and Osteoporosis**
 - **Tremors**
 - **History of Falls**



Why This Population?

- Rates of falls tend to be the highest among elders age 80+. 50% of the 80+ will have a fall in any given year.
- An elder aged 85+ is much more likely to die as a result of a fall than someone in the 65-69 age group.
- The fear of falling leads to functional decline, increasing depression, and further fall risk.



How Did We Do?

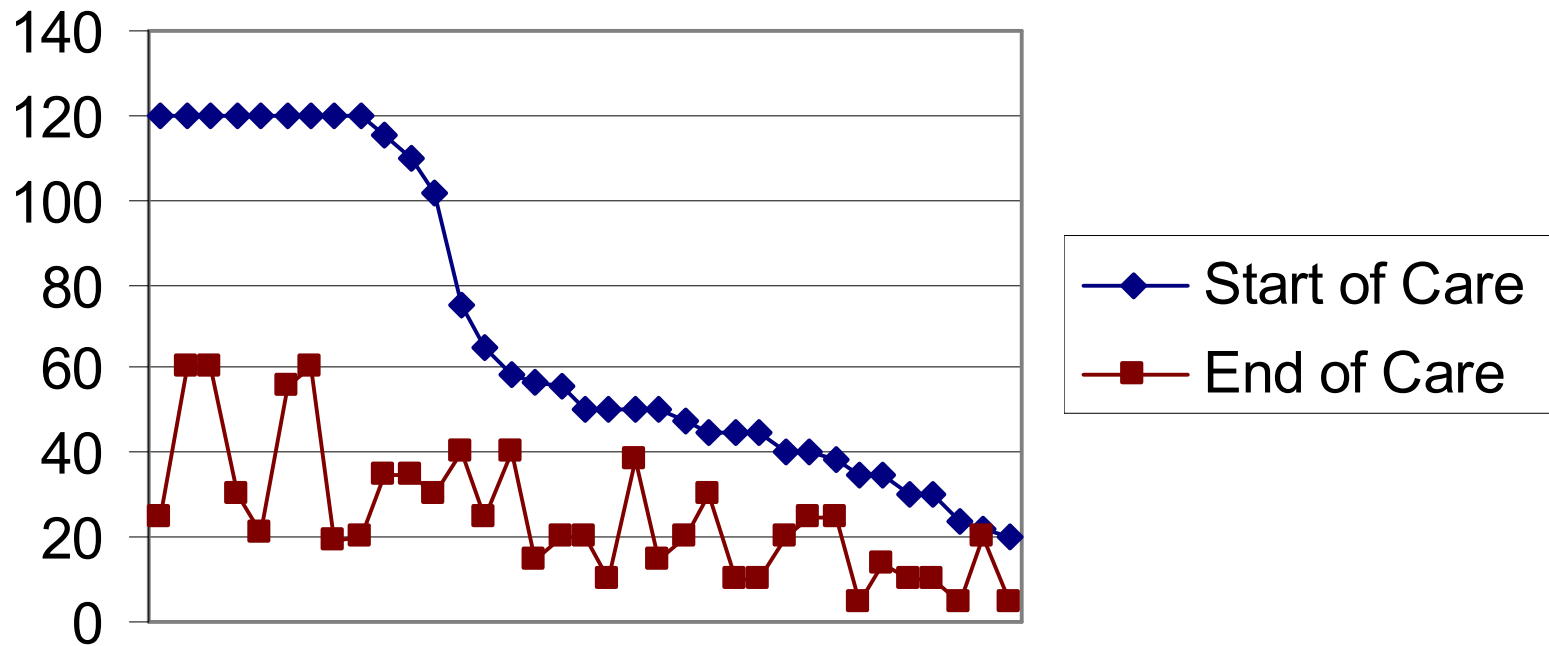
- **179 Identified clients**
- **99 Referrals to Willcare**
- **61 Enrolled in Otago Exercise Programme**
- **44 Graduated**
- **28 Entered coaching phase**

What Was The Impact?

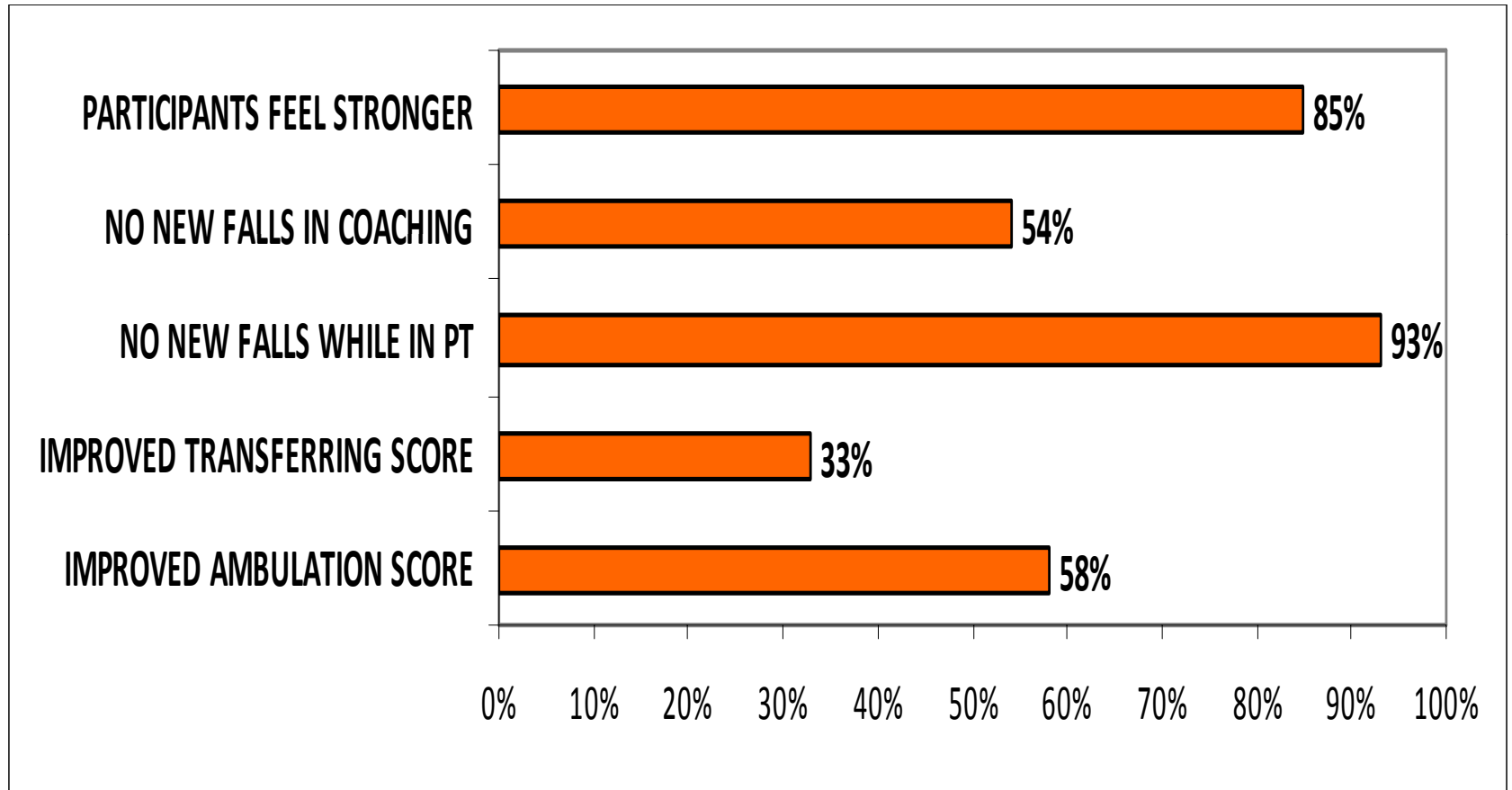


Fall Risk Reduced

CHAIR TEST-ALL PARTICIPANTS



Improved Quality of Life

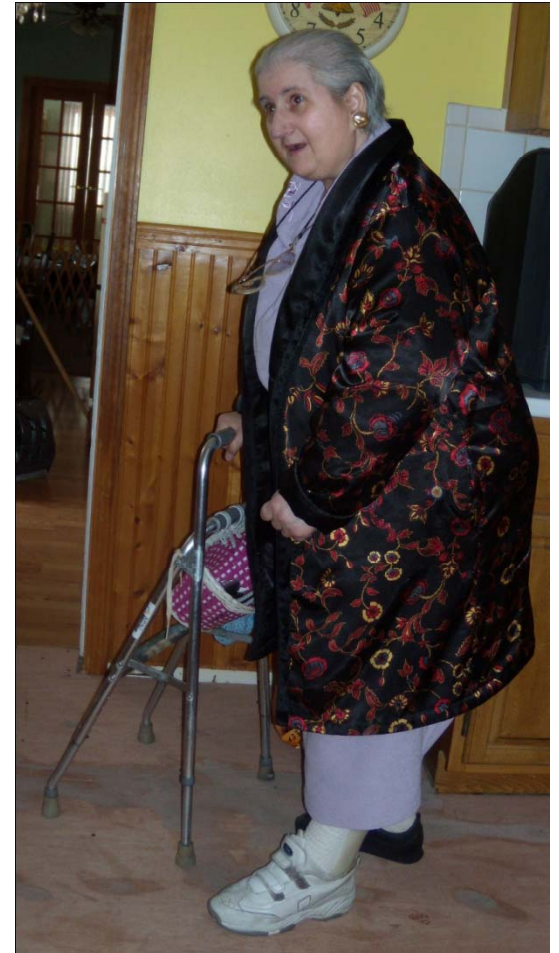


Able To Do More

- **“I can walk in the mall with my daughter.”**
- **“I can ride my stationary bike now.”**
- **“I can go shopping.”**
- **“I can bake a cake.”**
- **“I can go to lunch everyday.”**
- **“I was able to go on a trip to see my grandson get married.”**

Mrs S: A Success Story

- Afraid of falling, but....
 - *Feels stronger*
 - *Started attending senior center*
 - *Buying new clothes*
 - *Getting hair done*
 - *Belongs to Friendly Phones*
 - *Wants to do more.*



Maintaining

- **After PT phase, 6 months of coaching begins.**
- **80% of clients in month 1 report doing exercises.**
- **88% of clients in month 3 report doing exercises**
- **56% increase or maintain frequency of exercises over time**

Encountering Problems But Still Exercising

- **56% of participants report encountering problems**
 - **Pain**
 - **Stiffness**
 - **Fear**
- **86% of those encountering problems continue to exercise.**



Sustaining Fall Risk Reduction

- **Prior to program, the average participant had 1 to 2 falls in the previous 6 months.**
- **54% of participants in coaching have not fallen.**
- **25% report a fall during the first month of coaching.**



The Average Faller....

- **...is 86**
- **...has greater ADL deficits**
- **...report an average of 3 falls in the 6 months before entering program.**
- **...30% had 6 or more falls in previous 6 months**

Success Still?

■ Mrs. Z:

- *75 years old with Parkinson's*
- *Had more than 6 falls in the 6 months prior to starting the program*
- *Did not experience another fall until her fourth month of coaching.*



Obstacles

- **Regional availability of physical therapists**
- **Client resistance; fear of falling; pain**
- **Family resistance**
- **Case manager awareness**
- **Insurance companies traditionally do not pay for maintaining therapy**

Strategies To Overcome Obstacles

- **More training of case managers on:**
 - *recognizing fall risk*
 - *falls impact*
 - *working with families*
 - *new language*



Strategies To Overcome Obstacles

- **Present findings of project to Insurers**
- **Promote opportunity to reduce/eliminate co pays for In-home Fall Prevention Program**
 - *Include reimbursement for maintenance follow-up, after conclusion of initial program*

What Can Be Shared?

- **Philosophy**: Importance of treating client holistically and how falls prevention fits in.
- **Process**: identifying partners in the community
- **Incentives to clients**: calendars; night lights; check list for home
- **Data Collection**: forms; spreadsheets

Proposed Falls Prevention – Next Steps



2007-2008

Form WNY Falls Prevention Consortium

- Environmental Scan
- Identify best practices
- Develop Plan

2009-2010

WNY Falls Prevention Collaborative (Erie)

- Twelve teams
- Change personal behaviors of older adults
- Change professional practice

Social Marketing

- Media relations
- Walkability Study

2010-2012

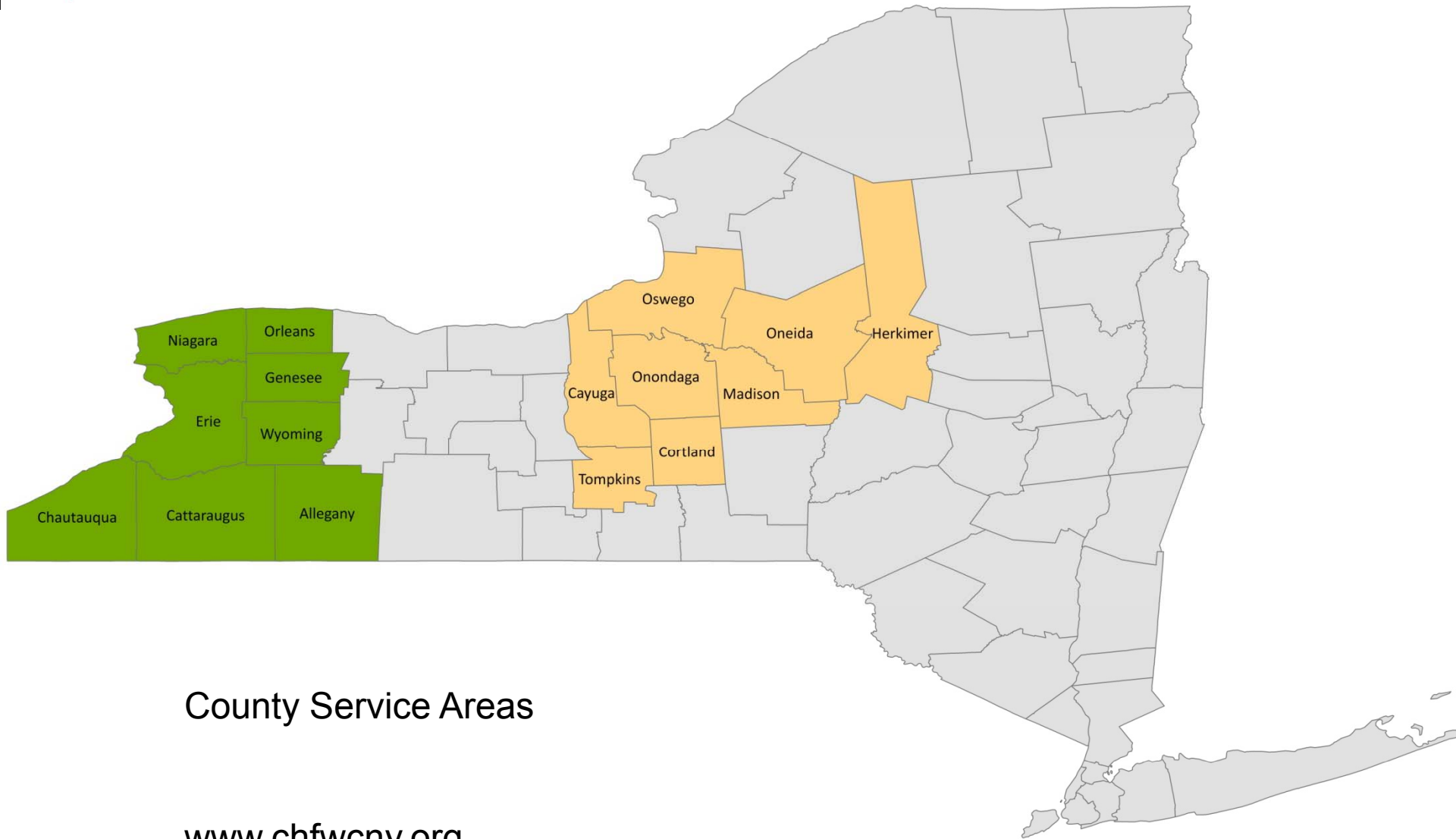
Falls Prevention Expansion

Erie County expansion and advanced projects to strengthen the effort

Multiple County Coalition-based planning and collaboratives to replicate WNY experience

Mega Collaborative of all Projects

Social Marketing



County Service Areas

www.chfwcny.org