

Keeping Minnesotans Right Side Up – What's New

MSHO Care Coordinator Training
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Falls, Osteoporosis, and other Chronic Diseases in Minnesota



Falls – the evidence

- ★ Falls are the leading cause of injury death among older adults
- ★ Hip fractures are among the most serious fall-related injuries
 - Half never regain their previous level of functioning
 - Many are unable to live independently after their injury
 - 20% die within the first year post-fracture



Falls in Minnesota

- ★ Leading cause of hospitalized injury
- ★ Leading cause of ED-treated injury
- ★ The problem is greater in Minnesota than in the rest of the country
- ★ The problem is not getting better in Minnesota
- ★ Falls among the elderly are driving health care costs and significantly impacting quality of life for our older adults



Total Acute Care Charges Associated with Nonfatal Falls Among Persons 65+ Minnesota, 1998-2005

★ Hospital Charges = \$1,022,083,080

Range: \$83.9 million to \$162.1 million per year

★ ED Charges = \$106,255,555

Range: \$5.8 million to \$20.4 million per year



Nonfatal Falls Among Persons 65+: Hip Fracture and TBI Minnesota, 1998-2005

★ Hip Fracture: N = 24,969

- 24,381 hospitalizations
- 1,488 ED visits
- Total charges = \$61.1 million

★ Traumatic Brain Injury: N = 13,931

- 5,281 hospitalizations
- 8,649 ED visits
- Total charges = \$207.9 million

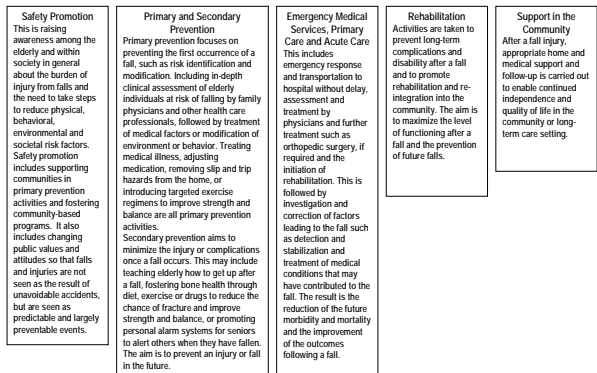


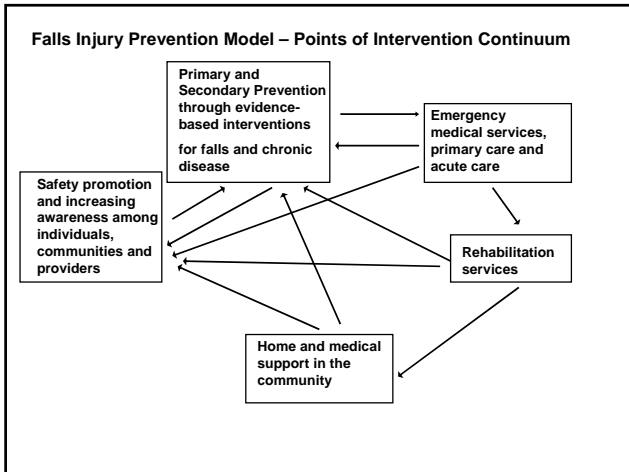
Key Elements of a Falls Prevention Intervention

- ★ Assessment
- ★ Education
- ★ Exercise to increase lower-body strength and balance
- ★ Home and environment assessment and modification
- ★ Medication review and modification
- ★ Vision evaluation and correction
- ★ Support for self-management of risk factors and fear
- ★ Nutritional considerations



Falls Injury Prevention Model – Points of Intervention Continuum





MN Falls Prevention Initiative

- ★ MN Board on Aging, Dept of Health and Dept of Human Services
- ★ October 2005: 3-year planning grant from U.S. Administration on Aging
- ★ Convening a broad range of public and private partners at the state, regional and local levels to implement a statewide coordinated evidence-based falls prevention initiative.



MN Falls Prevention Initiative



The Vision

Older Minnesotans will have fewer falls and fall-related injuries, maximizing their independence and quality of life.



Call to Action

- Articulates state “plan” for falls prevention and commitment of partners to work together
- Provides framework for action by professionals and community partnerships



MN Falls Prevention Initiative

Objectives



1. Increase awareness of prevalence and risk factors for falls.
2. Increase assessment of fall risk.
3. Increase availability of evidence-based interventions statewide.
4. Increase access to these interventions.
5. Enhance quality assurance efforts related to falls prevention.



Community Coordination and Collaboration

- ★ Coordinate services – referrals
 - Goals of community services providers
 - Populations served
 - Skills of service providers matched to service
- ★ Coordinate resources
 - Collaborate on funding initiatives
 - Collaborate on in-kind resources



MN Falls Prevention Website

- **Developed through collaborative effort of state partners**
- **Goal: to make it easy to take action to prevent falls**
- **Consumer and Professional Sections**
- **Evidence-based Recommendations**
- **Tools**



Let's keep Minnesotans right side up !

- ★ **www.mnfallsprevention.org**
- ★ **Listserv – visit**
 - <http://mailman.stpaul.visi.com/mailman/listinfo/fallsprevention>



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3 Key Questions

- * Three screening questions have been shown to have good predictive value for falls.
- * Physicians and others who work with older adults should use them to screen patients on a regular basis – at least once a year.



3 Key Questions

- * Have you fallen in the past year?
- * How many times have you fallen in the past year?
- * Are you afraid of falling?

An individual who answers yes to one or more of these questions is at risk of falling or of falling again and needs further assessment.



Home Assessment

- * Home safety checklist – link to CDC (Centers for Disease Control) and info on website
- * <http://www.cdc.gov/ncipc/duip/preventadultfalls.htm>
- * Assesses room by room and includes additional safety tips
- * Available in quantity from CDC as long as they last



Home Assessment

* Things to notice

- Tight walkways – using furniture for support
- Cluttered pathways, especially stairs
 - Books, clothes, newspapers, shoes
- Dark passageways or stairs
- Bathroom hazards – may need grab bars, non-skid mats or strips
- Items out of reach



Falls Prevention and Chronic Disease Management

- * Keys to chronic disease management include regular physical activity, medication management, education and healthy eating
- * 80% of those over 65 years have 1 or more chronic condition
- * 65% have multiple chronic conditions
- * Those with impaired strength, mobility, balance and endurance are twice as likely to fall as healthier persons
- * Those with more chronic conditions are more likely to die or sustain more serious injury when they fall



Chronic Disease in MN

* Of those over 65 years

- Age related macular degeneration - Approx. 25% (nationally)
- Alzheimers' Disease - 10% (nationally)
- Arthritis - 53%
- Diabetes - 13 %
- Heart Disease – 6+%
- Stroke - 3%
- Osteoporosis – 14.4%



Evidence-based Falls and Chronic Disease Management Interventions

- * **Currently available**
 - Arthritis Foundation Exercise Program
 - Arthritis Foundation Warm Water Exercise Program
 - Arthritis Foundation Self-Management Program
- * **www.arthritis.org**
- * **Early implementation – will be expanded**
 - EnhanceFitness Senior Exercise Program
 - CDSMP – Chronic Disease Self Management Program
 - Living Well With Chronic Conditions
 - Health East: Pathways to Better Health



Evidence-based Falls and Chronic Disease Management Interventions

* Coming

- **Matter of Balance**
 - Falls prevention that focuses on fear of falling and increasing physical activity
- **Healthy Eating for Successful Living in Older Adults**
 - Designed around nutrition principles for heart and bone health

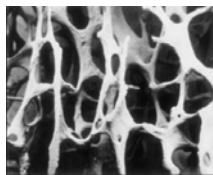


Concerns about Osteoporosis and Low Bone Mass

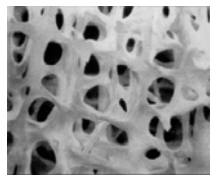
- * Osteoporosis is a silent disease
- * Osteoporosis can be prevented and can be diagnosed and treated before any fracture occurs
- * Fractures may lead to chronic pain, disability, and death
- * Costs estimated at \$17 billion (2001)



Osteoporotic Bone



Normal Bone



- * The bones in our skeleton are made of a thick outer shell and a strong inner mesh filled with collagen (protein), calcium salts and other minerals.
- * The inside looks like honeycomb, with blood vessels and bone marrow in the spaces between bone.



Strategies for Prevention and Management of Osteoporosis and Low Bone Mass

- * Adequate intake of Calcium and Vitamin D
 - Other nutritional considerations
- * Regular weight-bearing exercise
- * Avoid tobacco use and excessive alcohol intake
- * Pharmacologic therapy



Calcium and Vitamin D

- ★ Food vs Supplements
- ★ Sun vs Supplements



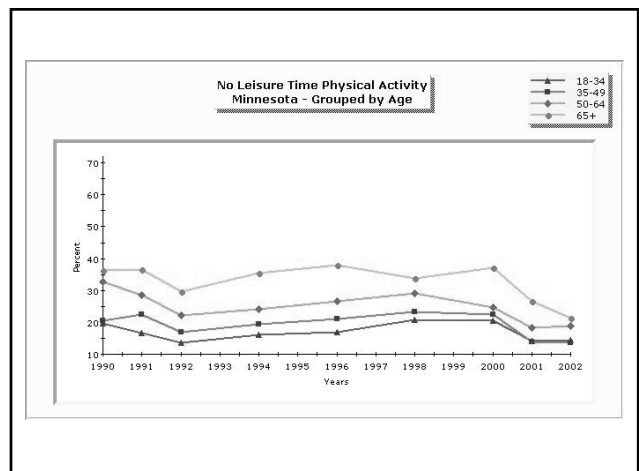
New Concerns

- ★ Is Calcium supplementation related to an increase in vascular events – heart and stroke?
 - Small study in New Zealand
 - May be related to age
 - May be related to underlying disease
 - Didn't consider Vitamin D
- ★ Take home message –
 - needs more investigation
 - Balance risks of heart events and osteoporosis risks
 - Don't use more Calcium supplement than needed



Calcium and Vitamin D and Other Chronic Diseases – more data

- ★ Prevention of falls with D and Calcium
- ★ Low D and increased Cardiovascular events



Benefits of Physical Activity

- * Pain management
- * Stress and depression management
- * Increase high density lipoproteins (HDL)
- * Decrease blood pressure
- * Decrease chronic disease risk
- * Improve chronic disease management
- * Weight management



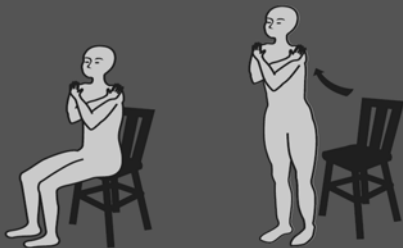
Physical Activity

- * Weight-bearing activity
- * Weight training
- * Safety



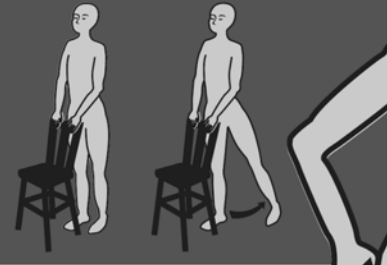
SIT TO STAND

A great exercise for strengthening thighs & buttocks.
Do three to five times each week.



SIDE HIP RAISE

The side hip raise targets the muscles of your hips and thighs.
Do three to five times each week.



Accessing Resources and Information

★ Senior Linkage Line

<http://www.mnaging.org/advisor/SLL.htm>
1-800-333-2433

★ MN.Help.info

<http://www.minnesotahelp.info/public/> may
also be accessed from the MN Board on
Aging Site www.mnaging.org



★ Falls Prevention Initiative Website

www.mnfallsprevention.org