

National Indian Council on Aging

Tacoma, Washington

2008



**WELL
BALANCED**

Wise Elders Living Longer

**National Resource Center on
Native American Aging**

WELL BALANCED · Wise Elders Living Longer

- Department of Health and Human Services –
AoA Grant Number: 90-AM-3080-02
- PI: Leander R. McDonald, PhD.- Dakota/Arikara
- Objectives:
 - 1) analyze the aggregate data from all three cycles to identify areas of health disparities and health promotion potential;
 - 2) construct curriculum for elder health promotion development; and
 - 3) administer training to Native aging agencies at regional and/or national forums.

Rationale: Elder Survey

Diseases

	Cycle I		Cycle II		Cycle III	
	N	(%)	N	(%)	N	(%)
Arthritis	4,479	(47.08)	5,356	(47.54)	7,175	(45.41)
Hypertension	4,769	(50.13)	5,748	(51.02)	8,915	(56.42)
Diabetes	3,577	(37.60)	4,118	(36.55)	6,474	(40.97)

Number of Falls

0	8,709	(55.11)
1	4,540	(28.73)
2	418	(2.65)
3	235	(1.49)
4+	119	(0.75)
Missing	1,781	(11.27)

Curriculum Development

- Dr. Laurie Betting
- Reviewers
 - Dr. Marica Mikulak
 - Dr. Beverly Johnson
- Other Contributors
 - Tasha Spawn
 - Ann Miller
 - Kim Rullifson
 - Twyla Baker-Demaray, MS, Mandan
- Logo Creator
 - Laura Vein
- Photographer
 - Wanda Weber
- Models
 - Nancy Martin, MS, INMed program, Spirit Lake Nation
 - Leigh Jeanotte, PhD, Director of the American Indian Center, Turtle Mountain Band of Chippewa

Rationale: Fall Facts

- More than ____% of elders fall each year and fall rates increase with advancing age.
- Nearly ____% of all fall related injuries occur at home.
- _____ are 2x more likely to be hospitalized due to falling.
- _____ are more likely to die from a fall.
- ____% of fallers reduce their activity level.

Objectives for WELL-Balanced

Promoting awareness and empower native elders to take steps to reduce chance of falling. Target elders with hypertension, diabetes or arthritis.

- Outcome measures include improvements in:
- Confidence concerning ability to manage the risk of falls and actual falls by increasing physical strength
 - Beliefs about ability to prevent falls and overcome fear of falling
 - Level of regular exercise
 - Social activity

Objectives for today's session

1. Discuss rationale for WELL-Balanced program (already did this!)
2. Discuss objectives for WELL-Balanced health improvement program (already did this too!)
3. Demonstrate some of the components of the program
4. Solicit feedback
5. Identify potential pilots sites for 2009
 - Application Process

Basics of the Program

- Groups of (preferably) no more than 12 elders.
- Sessions should be 90 minutes in length.
 - With the exception of assessment days (session 2.2 and 8.1)
- 2 session per week for 8 weeks.
- Resistance bands and stability balls are used for strength, endurance, flexibility and balance training.
- Both informative and instructive – facts and application.

Curriculum Outline

- Basics of the Program
- Coach's Corner
- Materials
- Cultural Changes
- Assessments
 - Physical Activity Readiness, Medical Clearance, and Participant Release
- Home Safety Checklist
- Support and WISE Goals
- Seated Balance
 - Activity 3.1.3 – Seated Balance With Voluntary Arm Movements
- Standing Balance
 - Activity 5.1.3 – Standing Balance With Altered Base of Support
- Walking Balance
 - Activity 7.1.2 – Walking With Directional Changes and Abrupt Starts and Stops
- Group Movement
 - Endurance, Strength, Flexibility
- Celebration of Completion
 - Ceremony

Coach's Corner

- Safety tips
- Exercise tips
 - Skills to be Learned
 - Feedback
- Class tips
 - Before
 - During
 - After
- Communication tips
- Checklist for each class
 - Attendance, agenda, etc.

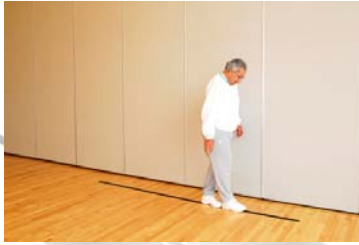
Assessments

- Physical Activity Readiness
 - Can you participate without being seen by a health care provider?
- Medical Clearance
 - Clearance from a health care provider to participate.
- Participant Release
 - Assurance they are ready to participate
- Assessment Day (Pre and Post)
 - Modified Fullerton Advanced Balance Scale: 6 items
 - Modified Senior Fitness Test: 2 items
 - 2 elders every 30 minutes

Let's bring up our volunteers!

Modified Fullerton

- Activity 2.1.1 – Reach Forward to retrieve an object held at shoulder height with outstretched hand
- Equipment: pencil and 12 inch ruler
- Testing procedures: instruct elder to raise the preferred arm to 90° and extend it with fingers outstretched. Use ruler to measure 10 inches from the end of the fingers. Hold pencil horizontally and level with height of participant's shoulder. Instruct elder to reach forward and grasp pencil without moving feet.



Tandem walk

- () 0 Unable to complete 10 steps independently
- () 1 Able to complete the 10 steps with more than 5 interruptions
- () 2 Able to complete the 10 steps with 5 or fewer interruptions
- () 3 Able to complete the 10 steps with 2 or fewer interruptions
- () 4 Able to complete the 10 steps independently and with no interruptions

Modified Senior Fitness Test

- Activity 2.1.1 – Chair Stand Test
- Equipment: stopwatch and straight back chair placed against wall
- Testing Procedure: Instruct elder to sit in middle of chair with back straight, feet flat and arms crossed at the wrist with arms across chest. On “go” the elder rises to full stand and returns to fully seated position. Encourage the elder to complete as many full stands as possible in 30 seconds.



7. Chair Stand Test

___ Number of stands completed in 30 seconds.

Home Safety Checklist

- Going through your home and checking for easy-fix hazards.
 - Carpet
 - Rugs
 - Lighting
 - Pets
 - Stairs
 - Stepstools
 - Handrails
 - Sidewalks
 - Etc...

Support and WISE Goals

- Identify changed habits, supports, and obstacles.
- Identify at least one person who will support you.
- Learn how to set goals that are:
 - Important to you
 - Obtainable
 - Measurable
 - Rewarding!

Home Activity Log

- Endurance
 - walking
- Flexibility
 - stretches
- Strengthening
 - Soup cans
- Balance
 - Clock drill

Seated Balance

- These activities teach you how to:
 - Develop a more upright seated posture,
 - Use vision to improve seated balance,
 - Develop a better sensory awareness of the body's position in space, and
 - Strengthen the muscles of the trunk.

Seated Balance



- Activity 3.1.3 – Seated Balance With Voluntary Arm Movements
- 2. Seated Double-Arm Raises**
 - a. With palms facing down, raise both arms to a lateral and horizontal position (even with shoulders) and hold for three counts (inhale).
 - b. Turn the palms up and continue raising the arms until they reach a vertical position with palms touching (exhale).
 - c. Hold for three counts (inhale), then lower the arms to the starting position, pausing briefly at the intermediate position to turn the palms down again (exhale).

Seated Balance



- Activity 3.1.4 – Seated Balance with Voluntary Trunk Movements

1. Seated Lateral Trunk Rotations

- a. Rotate trunk slowly to one side, keeping the hips directly forward while moving the shoulders and head. (The goal should be to look over shoulder to the wall behind.)
- b. Hold the position for three counts, then return to the starting position.
- c. Repeat in the opposite direction.

Seated Balance



- Activity 3.1.6 – Seated Balance With Dynamic Weight Shifts

2. Seated Forward and Backward Weight Shifts

- a. Shift weight by moving hips in a forward direction, hold for three counts, and return to starting position.
- b. Shift weight by moving hips backward, hold for three counts, and return to starting position.
- c. Repeat the exercise with the eyes closed.
- d. Repeat the forward and backward weight shifts, but move through the starting position without stopping.

Standing Balance

- These activities should teach you how to:
 - Develop a more upright standing posture,
 - Use vision to improve standing balance,
 - Develop a better sensory awareness of the body's position in space, and
 - Strengthen the muscles of the trunk.

Standing Balance

- Activity 5.1.3 – Standing Balance With Altered Base of Support
- 1. Standing Floor Activities**

Altered base of support.

 - a. Stand with feet together (or hip distance apart). Hold the position for 15 seconds. Repeat with the eyes closed.
 - b. Move the feet into a semi-tandem position (front foot ahead of the rear foot with a small space between the feet). Hold the position for 15 seconds. Repeat with the eyes closed.
 - c. Stand in heel-to-toe standing position (toe of rear foot touching heel of front foot). Hold the position for 15 seconds. Repeat with the eyes closed.
 - d. Adopt a one-legged stance (elder may rest the raised leg on the foot of or against the stance leg). Hold the position for 15 seconds. Repeat with the eyes closed.

Standing Balance

- Activity 5.1.6 – Standing Weight Shifts and Transfers
 - 1. Alternating Toe Touches into Step**
 - a. Alternate touching feet into 2, 4, or 6 inch step, The knee should be directly above the lead foot.
 - 7. Forward Step-Up/Step-Downs**
 - a. Step forward onto and then backwards off the step, ending on the same side of the step. (Do not cross over)
 - 9. Forward Swing-Through Steps**
 - a. Step forward onto the step with your right foot, lift your left foot over the step and place it on the floor on the opposite side of the step as where you started then bring your right foot down next to your left foot. Then turn around and repeat but start with your left foot on the step.

Walking Balance

- These activities should teach you how to:
 - Achieve a walking pattern that is efficient, flexible, and adaptable to changing tasks and environmental demands.

Walking Balance

- Activity 7.1.2 – Walking With Directional Changes and Abrupt Starts and Stops
 - a. Instruct elders to make abrupt starts and stops on command (e.g., verbal, whistle, music) while walking. (Provides elders with the opportunity to practice their gaze-stabilization techniques while moving. Use the following verbal cue: “Focus your eyes on a target directly in front of you and walk directly toward it.”)
 - b. Have elders change direction on verbal command or when the music is paused. Ask them to make a quarter turn followed by a half turn and, finally, a full turn on command.
 - b. Repeat the activity while walking using different gait patterns (e.g., backward, side step, marching with high knees). Periodically pause the music and announce a new walking pattern.

Busy Pow-Wow

Split your elders into four groups and place them at the four corners in your room. Place chairs randomly in the center area of the room, allowing enough space for at least two elders to walk past each other.

The purpose of this activity is to have elders move safely on a level surface through congestion with adjacent distraction.

Have one elder in one of those four groups start on command. Their goal is to walk across the room (kitty corner) through the chair maze, past the other elders that are crossing and get to the opposite side of the room. Once they arrive, their next team mate can begin to cross. Continue until all elders have crossed through the busy pow-wow.

You can repeat and add steps for elders to step up and across.

Walking Balance

- Activity 6.1.2 – Creek Crossing
 - a. Instruct elders to step forward across the creek, turn and step back to the starting side until they are unable to take a long enough step to avoid getting their feet wet.
 - b. Instruct elder to place only one foot on the opposite bank, then return the same foot back to the starting position. (equates to forward lunge)
 - c. Place objects in the creek for elders to pick up as they cross. On the return trip have them place the objects back into the creek.
 - d. Instruct elders to step forward across the creek and then backward when returning to the starting side.

Group Movement

- Warm-up – moving to music
 - 10 minutes
- Endurance – walking
 - 5-10 minutes
- Strengthening – resistance bands
 - 15 minutes
- Flexibility – stretching exercises
 - 10 minutes
- Transition to the Day – breathing
 - 10 minutes
- RPE Scale
 - “Safe Zone”



Back Kick: Stand and use the chair back for balance. Loop the center of the band around left ankle and stabilize the other end under right other foot. Kick the left foot backward, keeping the knee straight, and stretching out the band. Repeat on the other leg.



Triceps Press: Grasp one end of the band with your left hand against your chest. Grasp the other end of the band with your right hand (6 to 8 inches from left hand). Keeping the right elbow just below shoulder level and the lower arm parallel to the floor, press the right hand forward, extending the elbow. Slowly, return to the starting position. Repeat, and then do the exercise sequence with the left arm. *Can be performed seated or standing.*



Partner Push-Pulls

Muscles targeted: Muscles in the shoulders, upper and middle back, and chest and abdominals.

Position two individuals on stability balls or chairs facing each other at a distance of approximately 4 feet.

Use two lengths of resistance band, with each partner holding onto one end of each band.

Partners should sit tall and in the middle of the stability ball/chair with the feet hip-width apart and flat on the floor. Inhale.

Each partner pulls on one length of band while the other partner pulls on the other length of the band in a push-pull motion. Each partner exhales on each pulling motion.

- The body should remain erect during each phase of the push-pull movement.
- Repeat the exercise 10 times.
- Make sure that partners are of similar height and strength for this activity.



Side Bends

Muscles Targeted: Muscles on the sides and arms.

Extend one arm up and gently lean to the opposite side.

Repeat with the other arm.

- You should feel a stretch along your side.



Hamstrings

Muscles Targeted: Muscles in the back of the leg.

Sit in a chair and extend one leg forward resting heel on the floor. Keep your knee straight and gently lean forward toward your toes. Repeat on the other leg.

You should feel a stretch in the hamstrings.

Do not perform this stretch if it increases your leg pain.

Celebration/Recognition and Rewards

Purpose

- To acknowledge accomplishments
- To award resistance bands for continued home activity program
- To allow elders to include support person in celebrations
- To allow elder to share personal activity journal
- To allow elder to lead activity to demonstrate independence with activity program

Assessment and Evaluation

- The final session includes:
 - Pre to Post assessment comparison
 - Focus Group Questionnaire
 - Ongoing monthly progress self check
 - Home activity program sheets
- Recruit your next class and have elders mentor other elders!

Pilot Sites

- 6 sites are needed!
- Selected by geographical areas.
- Provided items may include:
 - The curriculum,
 - Forms,
 - Training assistance,
 - Telephone assistance, and
 - Evaluation.

Pilot Sites – Application Process

- Responsibilities
 - Pilot Native Site
 - Recruit 8-12 elders
 - Assistance with any issues (transportation, etc.)
 - Conduct the whole 8 week program
 - Provide a weekly update for NRCNAA
 - Provide NRCNAA with a copies of the final worksheets
 - NRCNAA
 - Mail curriculum and basic supplies kit
 - Provide basic training for coach, weekly updates, and guidance throughout the program
 - Listen to guidance from the coach throughout the program

Questions?

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- This project is sponsored by the NRCNAA, funded by the Administration on Aging.



WELLNESS CENTER
UNIVERSITY OF NORTH DAKOTA

- » **University of North Dakota Wellness Center**
♦ 801 Princeton Street ♦ Grand Forks, ND 58202 ♦



- » **National Resource Center on Native American Aging** at
the Center for Rural Health, University of North Dakota
♦ 501 N. Columbia Road ♦ Grand Forks, ND 58202 ♦

