

**Appendix A**  
**Data Collection Instruments**

# Implementing a Program to Prevent Injurious Falls in Assisted Living

## List of Research Measures with Administration Time by Type of Respondent

	Respondent:	Research staff only	Facility staff	Facility resident	Physician
<b>Measures</b>		<b>Time to administer (minutes)</b>			
<b>A. Facility Information</b>			15 (administrator)		
<b>B. Resident Interview</b>					
Mini Mental Status Exam				3	
Demographic and medical information				5-10	
Geriatric Depression Scale (5 or 15 item)				2	
Symbol Digit Modalities Test				3	
<b>C. Staff Interview</b>					
Resident Functional and Medical Status			3 (DCG)*		
Resident Cognitive status: MDS-COGS			5 (DCG)*		
Staff Demographics			2 (DCG)*		
<b>D. Chart Abstract</b>					
Medical history (chart review)		✓			
Current medications		✓			
Falls history (chart, report review)		✓			
<b>E. Resident Physical Assessment</b>					
Assistive devices				1	
Balance:					
Activity Specific Confidence Scale (ABC) balance self-confidence				5	
Standing Balance tests				2	
Dynamic balance tests				2	
Lower extremity impairment:					
10-Foot Walk Test				2	
Timed chair rise				2	
3 minute walk				3	
Additional physical assessment measures:					
Grip strength				1	
Timed up and go test				1.5	
<b>F. Physician Interview</b>					15

\*DCG = Direct caregiver

## PHYSICIAN QUESTIONNAIRE

THIS PROTOCOL WILL BE ADMINISTERED TO ALL PHYSICIANS WHO HAVE PATIENTS WHO RESIDE IN THE STUDY SITES. IT WILL BE ADMINISTERED IN-PERSON, AT BASELINE AND ONE YEAR.

*This interview is part of a project in several assisted living facilities, in which we are seeking to learn about the prevention and management of falls in this population. The interview itself is to learn from physicians who work in assisted living facilities about the issue. There are not right or wrong answers to this survey; it is designed to identify how the physician fits into the overall picture of falls management, and what physicians think about the topic. The interview will last between 20 minutes and half an hour. It will ask questions about yourself, your practice, what you think about risk factors for falls, screening for falls, and treatment of patients who fall. We very much appreciate your participation and, if you are interested, will provide you with a report of the project when it is completed. To begin, I'd like to get some information about you and your practice, so we can describe the participants in this project. .*

### DEMOGRAPHICS

1. What type of medical degree do you have?     MD     DO
  
- 2a. What is your specialty?     FP     IM     IM subspecialty (name): \_\_\_\_\_
- 2b. Do you have the Certificate of Special Competency in Geriatric Medicine from the American Board of Internal Medicine or the American Board of Family Medicine?  
                yes     no
- 2c. Have you been certified by the American Medical Directors Association (AMDA)?  
                yes     no
  
3. Did you attend a US medical school?  US     Non-US
  
4. In what year did you graduate? 19 \_\_\_\_ \_\_\_\_
  
5. Gender (do not ask):  Male     Female
  
6. In what year were you born? 19 \_\_\_\_ \_\_\_\_
  
7. Are you:         Hispanic or Latino     Not Hispanic or Latino
  
8. Are you?        American Indian/Alaska Native        Asian  
                   White    Black or African American  
                   Native Hawaiian or other Pacific Islander    Other \_\_\_\_\_

For the following questions, *please estimate what percent of your overall patients—not just those in assisted living -- are ....*

9. Patients over age 65   \_\_\_\_\_ %
10. Patients residing in nursing homes   \_\_\_\_\_ %
11. Patients who are Medicare beneficiaries   \_\_\_\_\_ %
12. Patients who are Medicaid recipients   \_\_\_\_\_ %
13. Patients whose racial/ethnic background is non-white \_\_\_\_\_ %
14. Patients residing in assisted living facilities   \_\_\_\_\_ %

## KNOWLEDGE ABOUT FALLS PREVENTION

A. Please consider the following with regard to **their importance in an assessment of falls risk among older adult patients who live in assisted living facilities.**

I will say a word or several words – such as “number of medications” – and you will state whether it is not at all important, a little important, moderately important, important, or very important as a **consideration in falls risk assessment.**

How important is ... in falls risk assessment?	Not at all important	A little important	Moderately important	Very Important	Extremely Important
1. Number of medications a patient is taking	1	2	3	4	5
Whether or not the patient is on ...					
2. an antipsychotic medication	1	2	3	4	5
3. an antianxiety medication	1	2	3	4	5
4. an antidepressant	1	2	3	4	5
5. a sleeping pill or other hypnotic	1	2	3	4	5
Whether or not the patient has....					
6. Diabetes mellitus	1	2	3	4	5
7. Urinary incontinence	1	2	3	4	5
8. Parkinson's disease	1	2	3	4	5
9. Arthritis	1	2	3	4	5
10. Depressive symptoms	1	2	3	4	5
11. Confusion	1	2	3	4	5
12. Cognitive problems	1	2	3	4	5
13. Vision problems	1	2	3	4	5
Whether or not the patient has a history of.....					
14. Stroke	1	2	3	4	5
15. Myocardial infarction	1	2	3	4	5
16. Falls	1	2	3	4	5
17. Fractures	1	2	3	4	5

B. Please consider the following **activities as a potential strategy for reducing the risk of falls among older adults patients who live in assisted living facilities.**

I will say a word or several words – such as “cardiovascular disorder treatment” – and will ask you to state how important it is that **it should be considered as a strategy for reducing the risk of falls.**

The response options are the same as before.

How important is it that ... should be considered as a strategy for reducing the risk of falls in assisted living patients?	Not at all important	A little important	Moderately important	Highly Important	Very Highly Important
1. Gait, balance and exercise for moderate risk patients	1	2	3	4	5
2. Medication modification	1	2	3	4	5
3. Postural hypotension treatment	1	2	3	4	5
4. Environmental hazard modification	1	2	3	4	5
5. Cardiovascular disorder treatment	1	2	3	4	5
6. Physical therapy for moderate risk patients	1	2	3	4	5

## IMPORTANCE OF FALLS PREVENTION

To what extent do you consider the following statements false or true, using the responses completely false, mostly false, somewhat false, somewhat true, mostly true, or completely true.

To what extent is it true that ...	Completely false	Mostly false	Somewhat false	Somewhat true	Mostly true	Completely true
1. My patients in assisted living facilities are concerned about falls and preventing falls.	1	2	3	4	5	6
2. I believe that falls are a big problem for elderly patients in assisted living facilities.	1	2	3	4	5	6
3. My patients in assisted living facilities have so many other medical problems that falls prevention seems less important.	1	2	3	4	5	6
4. Physicians are paid to diagnose and treat medical problems rather than assess the risk of falls among their patients in assisted living facilities.	1	2	3	4	5	6
5. The quality of patient care will be severely compromised if a physician is oblivious to the need to assess and manage the risk of falls among elderly patients in assisted living facilities.	1	2	3	4	5	6
6. Responsibility lies with the primary care physician to alert and educate the assisted living facility and staff about a patient's risk for falls and what can be done to reduce this risk.	1	2	3	4	5	6
7. Responsibility lies with the assisted living facility and its staff to identify a patient's risk for falls and what should be done to reduce this risk.	1	2	3	4	5	6

## SELF-EFFICACY REGARDING ABILITY TO PREVENT FALLS IN PATIENTS

How do you **rate your comfort or skill** in the following areas – poor, fair, good, or excellent?

	Poor	Fair	Good	Excellent
1. Assessment of falls risk in a new admission to a long-term care facility.	1	2	3	4
2. Assessment of an elderly patient who has fallen.	1	2	3	4
3. Assessment of an elderly patient who has had multiple falls.	1	2	3	4
4. Medications for a given condition that are most likely to increase the risk of falls.	1	2	3	4
5. Medications for a given condition that are least likely to increase the risk of falls.	1	2	3	4
6. When to order physical therapy or physical exercise to reduce the risk of falls.	1	2	3	4
7. Conditions to be fulfilled for a physical therapist to be reimbursed for falls-related care in a patient residing in an assisted living facility.	1	2	3	4
8. Your familiarity with the literature on steps that assisted living facilities can take to reduce the risk of falls.	1	2	3	4

## BELIEF IN OTHER'S ABILITY TO PREVENT FALLS

For the following questions, please consider **the role of others (staff at assisted living facilities, physical therapists, the patient himself/herself) in efforts to prevent falls among your patients** residing in assisted living facilities.

I will make a statement and you will use the false through true categories that we used earlier -- completely false, mostly false, somewhat false, somewhat true, mostly true, or completely true.

To what extent is it true that ...	Completely false	Mostly false	Somewhat false	Somewhat true	Mostly true	Completely true
1. High staff turnover in assisted living facilities hampers falls prevention efforts.	1	2	3	4	5	6
2. The assisted living facilities where I see patients are familiar with ways to prevent falls among elderly residents.	1	2	3	4	5	6
3. The staff at assisted living facilities do not have sufficient time to implement falls prevention programs.	1	2	3	4	5	6
4. The assisted living facilities where I see patients have the ability to implement a falls prevention program.	1	2	3	4	5	6
5. The assisted living facility – its leadership, management and staff – has primary responsibility for assessing the risk and preventing falls among their elderly residents.	1	2	3	4	5	6
6. It is unrealistic to expect staff at assisted living facilities to learn how to prevent falls among the elderly residents.	1	2	3	4	5	6
7. Assisted living staff are often unfairly blamed for falls among the elderly residents.	1	2	3	4	5	6
8. I do not know whose responsibility it is to assess the risk for falls among my elderly patients in assisted living facilities.	1	2	3	4	5	6

## OUTCOME EXPECTATIONS

For the following activities, please consider **their potential effectiveness in reducing falls among elderly patients residing in assisted living facilities.**

The response options are not at all effective, a little effective, moderately effective, effective, and very effective.

How effective do you think ... is in reducing falls among assisted living patients?	Not at all effective	A little effective	Moderately effective	Highly Effective	Very Highly Effective
1. Comprehensive review of all medications for potential adverse side effects	1	2	3	4	5
2. Physical therapy for patients at moderate falls risk	1	2	3	4	5
3. Physical exercise for patients at moderate falls risk	1	2	3	4	5
4. Thorough baseline assessment of residents for the risk for falls	1	2	3	4	5
5. Teaching assisted living facility staff how to assess the risk of falls	1	2	3	4	5
6. Teaching assisted living facility staff how to manage the risk of falls	1	2	3	4	5
7. Involving management at the highest levels of an assisted living facility in efforts to reduce falls	1	2	3	4	5
8. Targeting efforts on high risk residents	1	2	3	4	5

## NEED MORE INFORMATION ABOUT PREVENTING FALLS

The following question asks about **your own priorities in terms of continuing education or additional independent learning.**

Please rate the following topics in terms of your own need for or interest in additional information or training as not at all a priority, a low priority, a moderate priority, a high priority, or a very high priority.

To what extent is information about ... your priority for additional information?	Not at all a priority	A low priority	A moderate priority	A high priority	A very high priority
1. Coding and billing for assisted living visits	1	2	3	4	5
2. Coding and billing office visits	1	2	3	4	5
3. Assessment and management of dementia	1	2	3	4	5
4. Assessment, prevention and management of falls	1	2	3	4	5
5. Assessment, prevention and management of incontinence	1	2	3	4	5
6. Medications that should either not be prescribed or prescribed with caution in older people	1	2	3	4	5
7. The role of physical therapy in reducing the risk for falls among elderly patients	1	2	3	4	5
8. The role of physical exercise in reducing the risk for falls among elderly patients	1	2	3	4	5



Resident Name: \_\_\_\_\_  
(Black out after completion, ID check)

**Collaborative Studies of Long-Term Care:  
Falls Prevention Program in Assisted Living**

**E. Physical Assessments  
(PHY)**

3-2-2007

Facility ID:

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Resident ID:

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Interviewer ID:

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Date  
completed:

M	M	D	D	Y	Y

BLANK

## I. Assistive Devices

Now I would like to ask you a few questions about any assistive devices you use to help you walk.

1a. Over the past 7 days, have you used an assistive device, like a cane or a walker, to walk or move from place to place?

<sub>0</sub> No    <sub>1</sub> Yes    <sub>7</sub> Don't know



1b. What types of assistive device(s) have you used over the past 7 days?

			If yes, where do you usually use this device?
1. Walker	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
2. Hemi-walker	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
3. Broad quad cane	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
4. Narrow quad cane	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
5. Cane	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
6. Crutches	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
7. Wheelchair	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
8. Motorized scooter	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	
9. Other device, <i>specify</i> : _____	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes	

1c. If "yes" to any of the above devices, which one do you use most often: \_\_\_\_\_

1d. Do you use furniture in your living area to help you walk from one location to another?

<sub>0</sub> No    <sub>1</sub> Yes

2. Do you spend all or most of the day in a chair because of a health or physical condition?

<sub>0</sub> No    <sub>1</sub> Yes

## II. Readiness for Testing

Before we ask you to complete several everyday activities such as rising from a chair and walking, I would like to take your blood pressure and ask you a few questions about how you feel today .

1. BP: \_\_\_\_ \_\_\_\_ Systolic \_\_\_\_ \_\_\_\_ Diastolic

2. Do you have ANY pain today? <sub>0</sub> No <sub>1</sub> Yes If yes, where: \_\_\_\_\_



2a. If yes, is this usual for you? <sub>0</sub> No <sub>1</sub> Yes

3. Have you had any dizziness today? <sub>0</sub> No <sub>1</sub> Yes

4. Have you had any headaches today? <sub>0</sub> No <sub>1</sub> Yes

5. Have you had any recent surgical or medical procedures? <sub>0</sub> No <sub>1</sub> Yes

### III. Standing Balance Assessment

*Instructions: Participants should wear shoes with no or low heels. After giving instructions to the resident, demonstrate each position. Stress that if the resident feels it would be unsafe to try, he/she should not attempt to do it. If the activity is not being done properly, demonstrate it again and repeat instructions, but do not give more trials if the resident fails. Stand next to the participant to guard for balance loss. Assistive devices are NOT allowed.*

*Administer these tests next to a chair or table for support. The participant may use support of the chair/table to assume the position. As soon as the support is released start timing. Stop after 10 seconds or when the participant moves a foot or grabs for support (table, chair etc). Record the time to the nearest tenth second.*

*Use the following codes for all balance assessments (Sections II. & III.):*

93:	<i>Attempted but unable</i>
94:	<i>Interviewer felt unsafe</i>
95:	<i>Resident felt unsafe</i>
96:	<i>Resident unable</i>
98:	<i>Refused</i>

#### **Participant Instructions:**

**This test will assess your standing balance I would like you to try to stand in different positions. First I will show you each movement then I want you to try it. If you feel unsafe please tell me. Do you have any questions before we begin?**

#### **1. Semi-tandem stand**

Instructions:



**I would like you to stand with the side of the heel of one foot touching the side of your other foot. Please watch while I demonstrate. You may use your arms, or move your body to maintain your balance, but try not to move your feet. Hold this position until I say stop.**

*If the participant DID NOT hold the semi-tandem position for 10 seconds go on to test the side-by-side stand. If the participant was successful (held for 10 seconds), test full tandem stand and single leg stand.*

**1. Semi-tandem stand: \_\_\_\_ . \_\_\_\_ seconds**

## 2. Side by side stand

Instructions:



I would like you to stand with your feet together. Please watch while I demonstrate. You may use your arms, or move your body to maintain your balance, but try not to move your feet. Hold this position until I say stop.

2. Side by side stand: \_\_\_\_\_.seconds

## 3. Full tandem stand

Instructions:



I would like you to stand with the heel of one foot in front of and touching the toes of your other foot. Please watch while I demonstrate. You may use your arms, or move your body to maintain your balance, but try not to move your feet. Hold this position until I say stop.

3. Full tandem stand: \_\_\_\_\_.seconds

## 4. Single Leg Stand

Instructions:



I want you to stand on one leg. You may choose which foot you stand on. Watch while I demonstrate. You may not touch your free leg to the standing leg. Try not to put your foot on the floor. Do you have any questions? When you are ready, pick up one of your feet from the floor and hold it until I say stop.

\_\_\_\_\_.seconds

### III. Dynamic Balance Tests

#### 1. PICK UP PENCIL

*Place a pencil on the floor approximately 12 inches in front of the resident's dominant foot. Time from the command "go" until the resident is standing erect with the pencil in hand.*

Resident Instructions:

**When I say, "go", I want you to bend over pick up the pencil from the floor and stand back up. Watch me as I demonstrate". Demonstrate. " Are you ready? Go". Time from the command "go" until the resident is standing erect with the pencil in hand.**

*Use the following codes for Section III.1 & 2.:*

993:	<i>Attempted but unable</i>
994:	<i>Interviewer felt unsafe</i>
995:	<i>Resident felt unsafe</i>
996:	<i>Resident unable</i>
998:	<i>Refused</i>

**1. Time to complete: \_\_\_\_\_ seconds**

#### 2. 360° TURN

- *Place a piece of masking tape on the floor to mark a starting position.*
- *The resident stands with arms at his/her side and feet comfortably apart and pointing straight ahead at the tape.*
- *Start timing from the word Go and stop when the resident's shoulders are square facing you again. Record the time to complete the turn to a tenth of a sec.*
- *Have the resident do two trials. The resident will complete two trials one to the left and one to the right.*

Resident Instructions:

**When I say go, I want you to turn around at your normal pace making sure to go in a complete circle and take steps as you turn. Make sure you end up facing me. I'll show you. (demonstrate the turn).**

**We'll do two trials one to the left and one to the right. First you will turn to your right. When I say 'go' start turning. Ready, go. Guard the resident for balance loss.**

**2. Time to complete:**

**2a. Right \_\_\_\_\_ seconds**

**2b. Left \_\_\_\_\_ seconds**

## IV. 10-Foot Walk Test

*If the participant usually walks with an assistive device, they should use it for the test.*

- *Measure out 10 feet on the floor and mark these lines with masking tape. This is the walking path for timing walking speed.*
- *Measure and mark 3 feet before and after the walking path lines. These are the start and finish lines.*
- *Have the participant stand at the start line.*
- *Instruct the participant to walk to the finish line (the line 3 feet past the end of the walking path).*
- *Walk with the participant (slightly behind and to the side). Begin timing when the participant's foot crosses the line at the beginning of the 10 foot path and stop the watch when the foot first crosses the ending path line.*
- *Record the time to tenths of a second*
- *Complete two trials*

### 1. Comfortable Walking Pace (2 trials).

Resident Instructions:

**I want you to walk from here to \_\_\_\_\_ (give destination past the finish line) at your normal comfortable pace when I say, "go". Keep walking until I say stop. Ready, go.**

Be sure to say "**Ready, go**" in a neutral tone of voice so that the participant does not feel like it is a race.

*Use the following codes for Section IV:*

993:	<i>Attempted but unable</i>
994:	<i>Interviewer felt unsafe</i>
995:	<i>Resident felt unsafe</i>
996:	<i>Resident unable</i>
998:	<i>Refused</i>

**1.a. Trial 1:** \_\_\_\_ \_\_\_\_ \_\_\_\_ . \_\_\_\_

**1.b. Trial :** \_\_\_\_ \_\_\_\_ \_\_\_\_ . \_\_\_\_



## V. Timed Chair Rise

### 1. Single chair rise

*Have the participant sit erect in a standard height chair with the chair back against the wall. Ask the participant to fold both arms across his or her chest.*

*Instruct the participant to stand up one time without using arms. Record whether or not he was able to do this. If **the participant was NOT able** to get up with arms folded, do not test the repeated chair rise.*

**When I say go, I want you to stand up without using your arms.  
Demonstrate.**

**1. Completed chair rise:**                       No     Yes

### 2. Repeated chair rise.

*If the participant was successful with the single chair rise, test the repeated chair rises and time to tenth of a second.*

**When I say go, I want you to stand up and sit down as quickly as you can until I tell you to stop.  
Demonstrate.**

*Start timing from the command “go” until the participant is in the final seated position for the fifth chair rise. Record the time it takes the resident to complete the task and the number of complete chair rise repetitions (0-5)*

**2a. Time to complete repeated \_\_\_\_\_ seconds  
chair rise:**

*Use the following codes for Section V, 2a.:*

993:	<i>Attempted but unable</i>
994:	<i>Interviewer felt unsafe</i>
995:	<i>Resident felt unsafe</i>
996:	<i>Resident unable</i>
998:	<i>Refused</i>

**2b. Number completed:**

*Use the following codes for Section V, 2b.:*

\_\_\_\_\_ completed

93:	<i>Attempted but unable</i>
94:	<i>Interviewer felt unsafe</i>
95:	<i>Resident felt unsafe</i>
96:	<i>Resident unable</i>
98:	<i>Refused</i>

## VI. 3-minute Walk

*During this test, residents are asked to walk a predetermined course at a comfortable, self-selected pace, using whatever assistive device is normally used by the resident. The resident is allowed to rest but the clock continues running during any rest stops. Measure the walking path you will ask the resident to take in 20-50 foot increments. Be sure there are chairs placed strategically for the resident to rest, if necessary.*

### Resident Instructions:

**I want you to walk from here to \_\_\_\_\_ at your normal comfortable pace when I say, "go". Keep walking until I say stop. Ready, go.**

*Use the following codes for Section VII.:*

993:	<i>Attempted but unable</i>
994:	<i>Interviewer felt unsafe</i>
995:	<i>Resident felt unsafe</i>
996:	<i>Resident unable</i>
998:	<i>Refused</i>

**1. Distance covered:    \_\_\_ \_\_\_ \_\_\_ feet**

*Use the following codes for Section VI.2.:*

93:	<i>Attempted but unable</i>
94:	<i>Interviewer felt unsafe</i>
95:	<i>Resident felt unsafe</i>
96:	<i>Resident unable</i>
98:	<i>Refused</i>

**2. Number of stops:    \_\_\_ \_\_\_ stops**

## VII. Grip Strength

Have the participant sitting at a table in a straight back chair, with hips all the way at the back of the chair. Hand not being tested should rest in lap. The participant's forearm (dominant hand) should be resting on top of the table with the elbow at the edge. The forearm should be in neutral rotation, elbow flexed, and shoulder slightly flexed. Position the dynamometer grip at Position 2 (marked). Hand the participant the dynamometer. The tester will hold the dynamometer to help stabilize it in a vertical position.

### Resident Instructions:

**This is a test of your grip strength. Grip strength gives us an indication of how strong the other muscles in your body are.**

**I want you to squeeze this device as hard as you can for 3 seconds. The dynamometer won't move when you squeeze it. You will do three trials. Between each trial you will rest for 30 seconds. Are you ready? Squeeze.**

*Count to 3 as the participant squeezes the dynamometer.  
Allow 30 seconds of rest between each trial so the muscles do not fatigue.  
Record scores in pounds.*

Use the following codes for Section VII:

93:	Attempted but unable
94:	Interviewer felt unsafe
95:	Resident felt unsafe
96:	Resident unable
98:	Refused

**1. Number of pounds:** Trial 1: \_\_\_\_\_ pounds

Trial 1: \_\_\_\_\_ pounds

Trial 1: \_\_\_\_\_ pounds

## VIII. Timed "UP & GO" Test

The TUG test, measured in seconds, is the time taken by an individual to stand up from a standard chair (approximate seat height of 46 cm, arm height 65 cm), walk a distance of 3 meters (approximately 10 feet), turn, walk back to the chair, and sit down again. The subject wears his/her regular footwear and uses his customary walking aid (none, cane, or walker). No physical assistance is given.

### **Administration:**

Participants start with their back against the chair, their arms resting on the arm rests, and their walking aid at hand if needed.

### **Resident Instruction:**

**When I say go please stand up and walk as quickly and as safely as possible cross the line on the floor, turn around, walk back and sit in the chair.**

*Practice: Have the participant walk through the test once for practice before being timed in order to become familiar with the test.*

*Use a stop-watch to time the performance and watch closely for balance problems. Residents may have particular problems getting up out of the chair and turning around.*

### **Record:**

*Start timing from the **go** command and end when the resident sits in the seat of the chair.  
Time in seconds to tenths of a second.*

*Use the following codes for Section 8 :*

993:	<i>Attempted but unable</i>
994:	<i>Interviewer felt unsafe</i>
995:	<i>Resident felt unsafe</i>
996:	<i>Resident unable</i>
998:	<i>Refused</i>

**1. Walking speed \_\_\_\_\_. \_\_\_\_\_ seconds**

**Resident Name:** \_\_\_\_\_  
(Black out or erase after completion, ID check)

**Collaborative Studies of Long-Term Care:  
Falls Prevention Program in Assisted Living**

**D. Chart Abstract  
(ABS)**

**3-2-2007**

Facility ID: 

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Resident ID: 

--	--	--	--	--

Interviewer ID: 

--	--	--

Date completed: 

M	M	D	D	Y	Y

Developed / adapted for the Collaborative Studies of Long-Term Care  
Cecil G. Sheps Center for Health Services Research  
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## I. Resident Demographic and Medical History

1. Date resident admitted to facility?    \_\_\_\_ \_\_\_\_    \_\_\_\_ \_\_\_\_    \_\_\_\_ \_\_\_\_  
  Month                                  Day    Year

2. Resident date of birth?                                  \_\_\_\_ \_\_\_\_    \_\_\_\_ \_\_\_\_    \_\_\_\_ \_\_\_\_  
  Month    Day    Year

## II. Medication Use

*Record all medications administered in the last week. Photocopy chart, if possible, and staple to this form.*

Medication #	Medication Name	Dose	Administration	
			If given regularly, # times/day	If PRN, # of times/past week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

### III. Comorbid Conditions

Check thoroughly through chart for any of the following conditions, past or present. *Note any confusing or very specific language.*

	<u>No</u>	<u>Yes</u>
1. Heart disease	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
2. High blood pressure	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
3. Chronic lung disease	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
4. Stroke	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
4a. If yes, year of last stroke ____ _	←	
	<u>No</u>	<u>Yes</u>
5.		
6. Mini-stroke	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
7. Depression	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
8. Orthostatic hypotension	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
9. Chronic back pain	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
10. Cancer, other than skin cancer	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
11. Diabetes	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
12. Arthritis, or other musculoskeletal disorders	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
13. Dementia or Alzheimer's Disease (includes Vascular, Binswanger's disease, Pick's disease, Lewy Body disease, Creutzfeldt-Jakob disease, Huntington's Chorea, Alcoholic dementia, Organic Brain Syndrome, Chronic Confusion, Senile Dementia)	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
14. Parkinson's disease	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
15. Altered mobility or gait	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
16. Visual impairment	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
17. Hearing impairment	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
18. Dizziness	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
19. Dehydration	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
20. Blackouts	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
21. Seizures	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
22. Headaches	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>





**2. Has the resident:**

	<b>No</b>	<b>Yes</b>	<b>Date</b> (if indicated)
<b>a. Had a hip fracture in the last 6 months?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	___/___/_____
<b>b. Ever had a hip fracture?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	___/___/_____
<b>c. Had any other fracture in last 6 months?</b> <i>Describe:</i>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	___/___/_____

**VI. Assistive devices**

**1. Does this resident use any of the following:**

<b>1. Walker</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>2. Hemi-walker</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>3. Broad quad cane</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>4. Narrow quad cane</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>5. Cane</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>6. Crutches</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>7. Wheelchair</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>8. Motorized scooter</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>9. Other device, specify:</b> _____	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes

**VII. Attachment of equipment**

**1. Does this resident use any of the following:**

<b>1. Catheter stand</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>2. Oxygen</b>	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
<b>3. Other attached device, specify:</b> _____	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes

## VIII. Physician Contact Information

Physician contact information	
<b>1. Last name:</b>	
<b>2. First name:</b>	
<b>3. Degree</b>	
<b>4. Mailing address:</b> <b>a. Street 1:</b>	
<b>b. Street 2:</b>	
<b>c. Other:</b>	
<b>5. City/state/zip:</b>	City _____ State: ____ Zip _____
<b>6. Phone:</b>	(____ __ __) ____ - ____ - ____
<b>7. Fax</b>	(____ __ __) ____ - ____ - ____

Resident Name: \_\_\_\_\_

Staff Name: \_\_\_\_\_

(Black out after completion, ID check)

**Collaborative Studies of Long-Term Care:  
Falls Prevention Program in Assisted Living  
C. Staff Interview  
(STF)**

3-2-2007

Facility ID:

--	--

Resident ID:

--	--	--	--	--

Staff ID:

--	--

Interviewer ID:

--	--	--

Date  
completed:

M	M	D	D	Y	Y

## I. Physical Activities of Daily Living (MDS-ADL)

These first questions address activities of daily living. I'll be asking about *resident's* level of performance over the last seven days, and here are the answer categories I'd like you to use. *Show Cue Card C.*

### **0 = INDEPENDENT**

No help or oversight-OR-Help/oversight provided only 1 or 2 times during last 7 days.

### **1 = SUPERVISION**

Oversight, encouragement or cueing provided 3 or more times during last 7 days-OR-Supervision plus physical assistance provided only 1 or 2 times during last 7 days.

### **2 = LIMITED ASSISTANCE**

Resident highly involved in activity; received physical help in guided maneuvering of limbs, or other non-weight-bearing assistance 3 or more times-OR-More help provided only 1 or 2 times during last 7 days.

### **3 = EXTENSIVE ASSISTANCE**

While resident performed part of activity, over last 7-day period, help of following type(s) provided 3 or more times:

- Weight-bearing support
- Full staff performance during part (but not all) of last 7 days

### **4 = TOTAL DEPENDENCE**

Full staff performance of activity during ENTIRE 7 days.

**8 = ACTIVITY DID NOT OCCUR** during entire 7 days.

1. Over the last seven days, what has *resident's* level of performance been for the following activities (not including set-up)? *Read item, then ask: for this activity, would you say that resident has been Independent, or has he/she required Supervision, Limited Assistance, Extensive Assistance, or has he/she been Totally Dependent, or has the activity not occurred over the last seven days?*

	Independent	Supervision	Limited Assistance	Extensive Assistance	Total Dependence	Did not Occur
a. <b>Bed Mobility:</b> How he/she moves to and from lying position, turns side to side, and positions body while in bed.	0	1	2	3	4	8
b. <b>Transfer:</b> How he/she moves between surfaces - to/from bed, chair, wheelchair, standing position (EXCLUDE to/from bath/toilet).	0	1	2	3	4	8
c. <b>Locomotion on Unit:</b> How he/she moves between locations in his/her room and adjacent corridor on same floor. If in wheelchair, self-sufficiency once in chair.	0	1	2	3	4	8
d. <b>Dressing:</b> How he/she puts on, fastens, and takes off all items of street clothing, including donning/removing prosthesis.	0	1	2	3	4	8
e. <b>Eating:</b> How he/she eats and drinks (regardless of skill).	0	1	2	3	4	8
f. <b>Toilet Use:</b> How he/she uses the toilet room (or commode, bedpan, urinal): transfers on/off toilet, cleanses, changes pad, manages ostomy or catheter, adjusts clothes.	0	1	2	3	4	8
g. <b>Personal Hygiene:</b> How he/she maintains personal hygiene, including combing hair, brushing teeth, shaving, applying makeup, washing/drying face, hands, and perineum (EXCLUDE baths and showers).	0	1	2	3	4	8

2. Over the last seven days, how has *resident* taken a full-body bath/shower, sponge bath, and/or transferred in/out of tub/shower? (EXCLUDE washing of back and hair; code for most dependent.)

- <sub>0</sub> Independent-no help provided
- <sub>1</sub> Supervision-oversight help only
- <sub>2</sub> Physical help limited to transfer only
- <sub>3</sub> Physical help in part of bathing activity
- <sub>4</sub> Total dependence
- <sub>8</sub> Activity itself did not occur during entire 7 days

3. During the last seven days, was *resident* chairfast all or most of the time? <sub>0</sub> No <sub>1</sub> Yes

4. During the last seven days, was *resident* bedfast all or most of the time? <sub>0</sub> No <sub>1</sub> Yes

5. How would you describe *resident's* bladder continence in the past two weeks?

- <sub>0</sub> Continent: complete control
- <sub>1</sub> Usually continent: incontinent episodes once a week or less
- <sub>2</sub> Occasionally incontinent: two or more times a week, but not daily
- <sub>3</sub> Frequently incontinent: tended to be incontinent daily but some control present (e.g., on day shift)
- <sub>4</sub> Incontinent: had inadequate control; multiple daily episodes

6. How would you describe *resident's* bowel continence in the past two weeks?

- <sub>0</sub> Continent: complete control
- <sub>1</sub> Usually continent: incontinent episodes once a week or less
- <sub>2</sub> Occasionally incontinent: two or more times a week, but not daily
- <sub>3</sub> Frequently incontinent: tended to be incontinent daily but some control present (e.g., on day shift)
- <sub>4</sub> Incontinent: had inadequate control; multiple daily episodes

7. Is this resident able to go to the bathroom alone or does the resident need assistance? <sub>0</sub> No <sub>1</sub> Yes

8. Over the past 7 days has this resident used an assistive device, like a cane or a walker, to walk or move from place to place? <sub>0</sub> No <sub>1</sub> Yes



8b. What types of assistive device(s) were used over the past 7 days?

1. Walker	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
2. Hemi-walker	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
3. Broad quad cane	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
4. Narrow quad cane	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
5. Cane	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
6. Crutches	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
7. Wheelchair	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
8. Motorized skooter	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes
9. Other device	<input type="checkbox"/> <sub>0</sub> No	<input type="checkbox"/> <sub>1</sub> Yes

## II. Depressive Symptoms

A. Do you believe [*resident name*] is often sad or depressed?

<sub>0</sub> No <sub>1</sub> Yes

B. Cornell [*only ask if resident has cognitive impairment*]

During the **LAST SEVEN DAYS** did you notice that [*resident's name*]:

	None	Mild	Severe	Unable to Evaluate
1. Was anxious, or had an anxious expression, or has been worrying constantly?	0	1	2	7
2. Had a sad expression, a sad voice or has been tearful?	0	1	2	7
3. Lacked reactivity to pleasant events?	0	1	2	7
4. Was easily annoyed, short tempered or irritable?	0	1	2	7
5. Seemed restless, or wrung his/her hands, or pulled his/her hair or otherwise agitated?	0	1	2	7
6. Had slow movements, or slow speech or slow reactions?	0	1	2	7
7. Had many physical complaints? (Score 0 if intestinal complaints only)	0	1	2	7
8. Seemed less interested in his/her usual activities than he/she did in the last month?	0	1	2	7
9. Was eating less than usual?	0	1	2	7
10. Lost weight? (Score 2 if >5 lbs. in one month)	0	1	2	7
11. Lacked energy or got tired more easily than he/she did in the last month?	0	1	2	7
12. Had lower mood or seemed sadder in the morning on most days?	0	1	2	7
13. Had difficulty falling asleep?	0	1	2	7
14. Woke up many times during the night?	0	1	2	7
15. Woke up earlier than usual?	0	1	2	7
16. Said that life is not worth living, or had suicidal wishes or had an attempt at suicide?	0	1	2	7
17. Blamed him/herself unnecessarily, or had feelings of failure or poor self-worth?	0	1	2	7
18. Expected the worst?	0	1	2	7
19. Expressed beliefs about his/her financial situation, or physical illness or losses that were untrue?	0	1	2	7

### III. MDS-COGS

1. Over the last seven days, was this resident comatose or in a persistent vegetative state with no discernable consciousness? (Check one)

<sub>0</sub> No; resident was NOT comatose or in a persistent vegetative state

<sub>1</sub> Yes; resident was comatose or in a persistent vegetative state

2. Over the last seven days, how would you describe this resident's:

a. **short-term** memory? How well does the resident recall information after 5 minutes? (Check one) <sub>0</sub> Memory Okay <sub>1</sub> Memory Problem

b. **long-term** memory? How well does the resident recall information that has long past? (Check one) <sub>0</sub> Memory Okay <sub>1</sub> Memory Problem

3. Over the last seven days, could this resident recall the following items? (Check one for each item)

a. Current season <sub>1</sub> Can Recall <sub>0</sub> Cannot Recall

b. Location of own room <sub>1</sub> Can Recall <sub>0</sub> Cannot Recall

c. Staff names/faces <sub>1</sub> Can Recall <sub>0</sub> Cannot Recall

d. That he/she is in an assisted living facility <sub>1</sub> Can Recall <sub>0</sub> Cannot Recall

4. How would you describe this resident's cognitive skills for daily decision-making? (Check one)

<sub>0</sub> Independent – decisions are consistent and reasonable

<sub>1</sub> Modified Independence – some difficulty in new situations only

<sub>2</sub> Moderately Impaired – decision poor; cues/supervision required

<sub>3</sub> Severely Impaired – never/rarely made decisions

5. How would you describe this resident's ability to make himself/herself understood or express information, however he/she is able? (Check one)

<sub>0</sub> Understood

<sub>1</sub> Usually understood – difficulty finding words or finishing thoughts

<sub>2</sub> Sometimes understood – ability is limited to making concrete requests

<sub>3</sub> Rarely/never understood

6. How would you describe this resident's ability to understand others' verbal information content, however he/she might be able? (Check one)

<sub>0</sub> Understood

<sub>1</sub> Usually understands – may miss some part/intent of message

<sub>2</sub> Sometimes understands – responds adequately to simple direct communication

<sub>3</sub> Rarely/never understands



7. On a scale of 1 to 4, where 1 is “not very well at all” and 4 is “very well”, how well would you say you know about this resident’s health and function? (Check one)

- <sub>1</sub> Not very well at all
- <sub>2</sub> Fairly well
- <sub>3</sub> Pretty well
- <sub>4</sub> Very well

#### IV. Relationship History

1. How long have you known this resident, both before and after they came to live at the facility? \_\_\_\_\_  
Years      Months      Days

2. How long have you provided cared for this resident? [Note: only report days if respondent has known resident less than 1 month] \_\_\_\_\_  
Years      Months      Days

#### V. Staff Information

1. What is your job title at this facility? \_\_\_\_\_   

2. How long have you been in this current position? \_\_\_\_\_ years \_\_\_\_\_ months

3. How long have you worked at this facility? \_\_\_\_\_ years \_\_\_\_\_ months

4. What is your highest level of education completed?
- <sub>1</sub> Junior High or Middle School
  - <sub>2</sub> Some high school
  - <sub>3</sub> High school grad or GED
  - <sub>3</sub> 2-year college or associate’s degree
  - <sub>4</sub> Some college (no degree)
  - <sub>5</sub> 4-year college degree or higher

5a. Which of the following certifications or licensures do you hold?

<i>Check all that apply:</i>	
1. RN	<input type="checkbox"/> <sub>0</sub> No <input type="checkbox"/> <sub>1</sub> Yes
2. LPN	<input type="checkbox"/> <sub>0</sub> No <input type="checkbox"/> <sub>1</sub> Yes
3. CNA or Certified Personal Care Assistant	<input type="checkbox"/> <sub>0</sub> No <input type="checkbox"/> <sub>1</sub> Yes
4. Medication assistant	<input type="checkbox"/> <sub>0</sub> No <input type="checkbox"/> <sub>1</sub> Yes

6. What is your sex? [DO NOT ASK]

<sub>1</sub> Male      <sub>2</sub> Female

7. What year were you born?

\_\_\_\_ \_

8. Is English your first language?

<sub>0</sub> No    <sub>1</sub> Yes

If **NO**, what is: \_\_\_\_\_ ]

9. What of the following best describes your race?

[check one]

<sub>1</sub> American Indian or Alaska Native

<sub>2</sub> Asian or Pacific Islander

<sub>3</sub> Black or African American

<sub>4</sub> White

<sub>5</sub> Other

10. Are you Latina or Latino?

<sub>0</sub> No    <sub>1</sub> Yes

***Do not ask the following item. This is meant to capture the interviewer's own perspective.***

1. Overall, how confident are you about the accuracy of the respondent's replies?

1 = Not at all confident

2 = A little confident

3 = Quite confident

4 = Very confident

Resident Name: \_\_\_\_\_  
(Black out or erase after completion, ID check)

**Collaborative Studies of Long-Term Care:  
Falls Prevention Program in Assisted Living**

**B. Resident Interview  
(RES)**

3-2-2007

Date  
completed:

M	M	D	D	Y	Y

Facility  
ID:

--	--

Resident  
ID:

--	--	--	--	--

Interviewer  
ID:

--	--

## I. Mini-Mental State Exam

Now I would like to ask you some questions that use your memory and concentration. Please listen carefully until I have finished reading the each question before you respond. Please try to answer each question even if you are not sure of your answer. Do you have any questions?

(Use the following codes for the remaining questions)

1=Correct response  
 0=Incorrect response  
 6=Can't do (physically unable)  
 8=Refused (won't answer/attempt)

	<u>Record Answer</u>	<u>Correct</u>	<u>Incorrect</u>	<u>Can't do</u>	<u>Refused</u>
1. What is the year?.....	_____	1	0	6	8
2. What is the season?	_____	1	0	6	8
3. What is the date? .....	_____	1	0	6	8
4. What is the day of the week?	_____	1	0	6	8
5. What is the month? .....	_____	1	0	6	8
6. Can you tell me where we are right now? For instance, what state are we in?	_____	1	0	6	8
7. What town/city are we in? .....	_____	1	0	6	8
8. What county are we in?	_____	1	0	6	8
9. What floor of the building are we on? .....	_____	1	0	6	8
10. What is the name of this facility?	_____	1	0	6	8

		<u>Correct</u>	<u>Incorrect</u>	<u>Can't do</u>	<u>Refused</u>
11. I am going to name three objects. After I have said them I want you to repeat them. Remember what they are, because I am going to ask you to name them again in a few minutes. Please repeat the three items for me. "Apple"... "Table"... "Penny"... (Score first try. Repeat objects until all are learned, up to six times.)	A. APPLE:	1	0	6	8
	B. TABLE:	1	0	6	8
	C. PENNY:	1	0	6	8

12. Can you subtract 7 from 100, and then subtract 7 from the answer you get, and keep subtracting 7 until I tell you to stop?

**RECORD NUMBERS:**

\_\_\_\_\_ (93)    \_\_\_\_\_ (86)    \_\_\_\_\_ (79)    \_\_\_\_\_ (72)    \_\_\_\_\_ (65)

Code number correct

(0-5):

Code if applicable: 6=Can't do  
 8=Refused to respond

13. Now I am going to spell a word forwards, and I want you to spell it backwards.  
The word is WORLD, W-O-R-L-D. Spell "world" backwards.

*(Repeat instructions if necessary, but not after resident begins spelling)*

PRINT LETTERS:

\_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_  
(D)            (L)            (R)            (O)            (W)

Code number correct

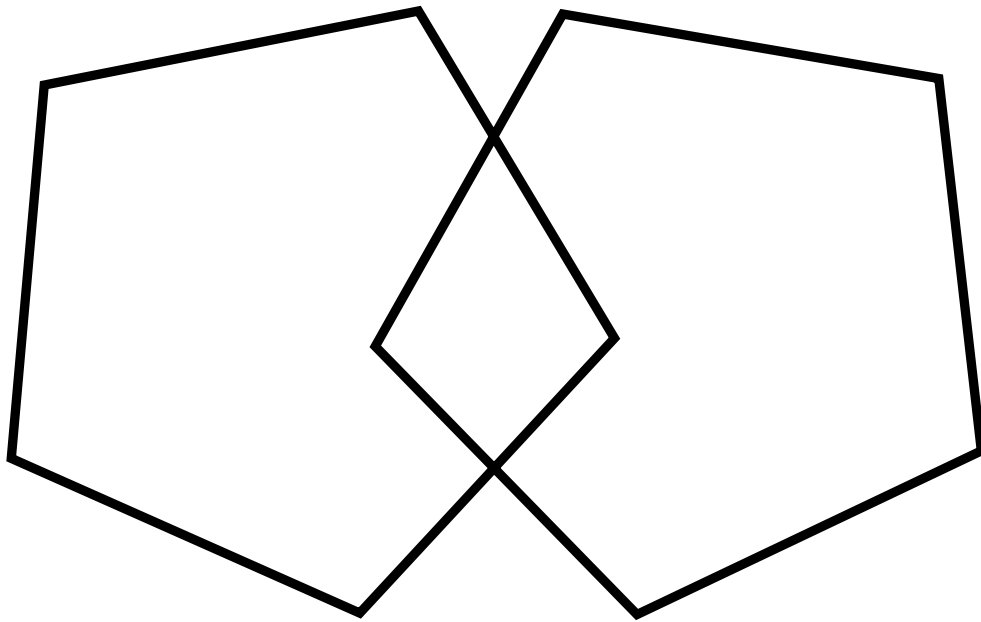
(0-5):

Code if applicable: 6=Can't do  
8=Refused to respond

*Use the following codes for the remaining questions:*

1=Correct response  
0=Incorrect response  
6=Can't do (physically unable)  
8=Refused (won't answer/attempt)

		Correct	Incorrect	Can't do	Refused
14. Now what were the three objects I asked you to remember?	A. APPLE:	1	0	6	8
	B. TABLE:	1	0	6	8
	C. PENNY:	1	0	6	8
(Show wristwatch) 15. What is this called?	WATCH:	1	0	6	8
(Show pen) 16. What is this called?	PEN:	1	0	6	8
17. I'd like you to repeat a phrase after me. Listen carefully until I finish and repeat this phrase: "No ifs, ands, or buts" ( <i>Allow only one trial</i> )		1	0	6	8
18. Read the words on this card and then do what it says. ( <i>Show resident "Close your eyes" cue card A.</i> )		1	0	6	8
(Read full statement and then give resident the paper.) 19. I'm going to give you a piece of paper. When I do, take the paper in your right hand, fold the paper in half with both hands, and put the paper down on your lap. ( <i>Do not coach or repeat instructions.</i> )	A. RIGHT HAND:	1	0	6	8
	B. FOLDS:	1	0	6	8
	C. IN LAP:	1	0	6	8
20. Here is a drawing. Please copy the drawing on the same paper. ( <i>Show next page</i> ) ( <i>Consider correct if the two 5-sided figures intersect to form a 4-sided figure, and if all angles in the 5-sided figures are preserved.</i> )		1	0	6	8
21. Write any complete sentence on this piece of paper for me. ( <i>Use page _</i> ) ( <i>Sentence should have a subject and a verb, and make sense. Spelling and grammar errors are acceptable.</i> )		1	0	6	8



## II. Demographics

Now, I would like to ask you a few questions about you and your health.

1. What is your highest level of education completed?

- <sub>1</sub> Junior High or Middle School
- <sub>2</sub> Some high school
- <sub>3</sub> High school grad or GED
- <sub>3</sub> 2-year college or associate's degree
- <sub>4</sub> Some college (no degree)
- <sub>5</sub> 4-year college degree or higher
- <sub>1</sub> Junior High or Middle School
- <sub>2</sub> Some high school

2. What of the following best describes your race? *[check one]*

- <sub>1</sub> American Indian or Alaska Native
- <sub>2</sub> Asian or Pacific Islander
- <sub>3</sub> Black or African American
- <sub>4</sub> White
- <sub>5</sub> Other
- <sub>77</sub> (Code if respondent says "Don't Know")

3. What is your ethnic background?

- <sub>1</sub> Hispanic
- <sub>2</sub> Not of Hispanic origin

4. What is your gender? *(DO NOT ASK)*

- <sub>1</sub> Male
- <sub>2</sub> Female

5. What is your marital status?

- <sub>1</sub> Never Married
- <sub>2</sub> Married
- <sub>3</sub> Widowed
- <sub>4</sub> Separated
- <sub>5</sub> Divorced
- <sub>77</sub> (Code if respondent says "Don't Know")

### III. Medical History

Now I'd like to ask you about your medical history.

**1. Have you ever been told by a doctor that you had:**

	<u>No</u>	<u>Yes</u>
Heart disease	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>b.</b> High blood pressure	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>c.</b> Chronic lung disease	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>d.</b> Stroke	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
4a. If yes, year of last stroke ____ ←		
<b>e.</b>	<u>No</u>	<u>Yes</u>
<b>f.</b> Mini-stroke	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>g.</b> Depression	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>h.</b> Orthostatic hypotension	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>i.</b> Chronic back pain	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>j.</b> Cancer, other than skin cancer	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>k.</b> Diabetes	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>l.</b> Arthritis, or other musculoskeletal disorders	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>m.</b> Dementia or Alzheimer's Disease (includes Vascular, Binswanger's disease, Pick's disease, Lewy Body disease, Creutzfeldt-Jakob disease, Huntington's Chorea, Alcoholic dementia, Organic Brain Syndrome, Chronic Confusion, Senile Dementia)	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>n.</b> Parkinson's disease	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>o.</b> Altered mobility or gait	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>p.</b> Visual impairment	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>q.</b> Hearing impairment	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>r.</b> Dizziness	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>s.</b> Dehydration	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>t.</b> Blackouts	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>u.</b> Seizures	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>v.</b> Headaches	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>

**2. Are you able to go to the bathroom alone or do you need assistance?**

<sub>0</sub> No    <sub>1</sub> Yes



## IV. Pain

	Not at all	A little	Moderately	Quite a bit	Extremely
1a. In general, how much have you been bothered by pain over the past few weeks?	0	1	2	3	4
1b. How much are you bothered by pain right now?	0	1	2	3	4
1c. How much are you bothered by pain when it is at its worst?	0	1	2	3	4
1d. How many days a week does the pain get really bad?	(Record number from 0 to 7 days.) _____				
1e. How much are you bothered by pain when it is at its least?	0	1	2	3	4
1f. How much has the pain interfered with your day-to-day activities?	0	1	2	3	4

No      Yes

2. Today, have you been given medicine for physical pain or discomfort?      <sub>0</sub>      <sub>1</sub>

### 3. Pain Rating Scale

**Please look at this line.** (*Show Pain Scale.*)

**This line goes from No Pain at one end to the Worst Pain possible at the other end. Point to the place on the line that shows how much physical pain or discomfort you have had in the past week.**

(*Enter the corresponding number as the score.*)

<p><b>3. Score:</b> ____ ____ (00-10)</p>
---

## V. Self-Rated Health

Now I'd like to ask you about your current health.

1. In general, would you say your health is:

- <sub>1</sub> Excellent  
<sub>2</sub> Very Good  
<sub>3</sub> Good  
<sub>4</sub> Fair  
<sub>5</sub> Poor

### 3., Falls and Fractures

<b>a. In the last 6 months, how many times have you fallen? (If &gt; 0, ask dates):</b>	_____	
<b>In the last 6 months, have you:</b>	<b><u>No</u></b>	<b><u>Yes</u></b>
<b>b. fallen and hurt yourself?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>c. needed to see a doctor because of the fall?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>d. been afraid that you would fall because of balance or walking problems?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>e. fallen and not been able to get up without help?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>f. fallen and not been able to get up without help?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>g. broken your hip?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>h. broken a bone other than your hip?</b>		

## VI. Depressive Symptoms (5-item GDS)

The next few questions are about how you are feeling.

Choose the best answer for how you felt over the past week.

	<b><u>No</u></b>	<b><u>Yes</u></b>
<b>1. Are you basically satisfied with your life?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>2. Do you often get bored?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>3. Do you often feel helpless?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>4. Do you prefer to stay home rather than going out and doing new things?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
<b>5. Do you feel pretty worthless the way you are now?</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>

## VII. Activities-Specific Balance Confidence (ABC) Scale

### **Interviewer Instructions**

*Hand the participant the response sheet with the scale on it. It is important that the tester repeats the sentence stem “How confident are you that you could...without losing your balance or becoming unsteady” at least every second item.*

### **Participant Instructions:**

**I will ask you a series of questions about how confident you are with your balance while performing activities that you may encounter in your daily life. For each of the following activities, please indicate your level of confidence in doing the activity *without losing your balance or becoming unsteady*. Choose a percentage between 0% and 100%. One hundred percent means you are completely confident.**

**If you do not currently do the activity in question, try to imagine how confident you would be if you had to do the activity. If you normally use a walking aid or hold on to someone or something, rate your confidence as if you were using these supports. If you have any questions about answering these items, please ask.**

### **Scoring:**

*Ratings should consist of whole numbers 0-100 for each item. Total the ratings (range 0-1600) and then divide the number by 16 to get the ABC score.*

*If the participant qualifies his/her response to items 2, 9, 11, 14, 15 with different ratings for up vs. down, or onto vs. off, get separate ratings and use the **lowest** of the two (since this will limit the entire activity, for instance likelihood of using the stairs).*



## **VII. Symbol Digit Modalities Test** (Oral version)

The next activity measures visual attention and how quickly you process information

*Instruction to interviewer: Place the test form in front of the examinee and read the following verbatim.*

Please look at these boxes at the top of the page. You can see that each box in the upper row has a little mark in it. Now look at the boxes in the row just underneath the marks. Each of the marks in the top row is different, and under each mark in the bottom row is a different number.

Now look at the next line of boxes (examiner points to the line of boxes) just under the top two rows. Notice that the boxes on the top have marks, but the boxes underneath are empty. I want you to tell me what number to fill in each empty box according to the way they are paired in the key at the top of the page.

### **PRACTICE:**

For example, if you look at the first mark, and then at the key, you will see that the number 1 goes in the first box. Now, what number should go in the second box? That's right. What number goes in the third box? (Number 2) Two, right. That is the idea.

You are to tell me which number to write in each of the empty boxes according to the key. Now for practice, let's do the rest of the boxes on the top line until we come to the double line

*Check to see that nature of the test is clearly understood before proceeding. If not, repeat directions with further examples.*

Now, when I say "Go" tell me which numbers to fill in like you have been doing until I say "Stop". When you come to the end of the first line, go quickly to the next line without stopping, and so on. Do not skip any boxes and work as quickly as you can. Ready? Go.

*After 90 seconds say, "**STOP**".*

*SCORING: the number of correct substitutions completed in 90 seconds. Do not include those completed for practice.*

SYMBOL DIGIT MODALITIES TEST

KEY

(	÷	┌	Γ	┐	>	+	)	÷
1	2	3	4	5	6	7	8	9

(	┐	÷	(	┌	>	÷	Γ	(	>	÷	(	>	(	÷

Γ	>	(	÷	┐	>	┌	Γ	(	÷	>	÷	Γ	┌	)

Γ	┐	+	)	(	┌	+	Γ	)	┐	÷	÷	┌	Γ	+

÷	Γ	┐	(	>	Γ	(	┐	>	+	÷	)	┌	>	Γ

÷	┐	)	┌	>	+	Γ	┐	÷	┌	+	÷	÷	)	(

>	÷	+	÷	┌	>	Γ	÷	(	+	÷	┐	>	)	Γ

÷	)	+	÷	┌	+	)	┐	(	÷	÷	(	Γ	┌	>

┐	÷	(	>	Γ	÷	(	>	÷	+	┌	┐	Γ	)	÷

SDMT: \_\_\_\_\_

***Do not ask the following item. This is meant to capture the interviewer's own perspective.***

*1. Overall, how confident are you about the accuracy of the respondent's replies?*

1 = Not at all confident

2 = A little confident

3 = Quite confident

4 = Very confident

**Collaborative Studies of Long-Term Care:  
Falls Prevention Program in Assisted Living**

**A. Facility Information  
(FAC)**

3-2-2007

Facility ID: 

--	--

Interviewer  
ID: 

--	--	--

Master Facility  
ID: 

--	--	--

Date: 

M	M	D	D	Y	Y



# I. Facility Characteristics

1. a. Is your facility's ownership for profit, non-profit, or government?
- <sub>1</sub> Profit
- <sub>2</sub> Non-profit
- <sub>3</sub> Government

2. a. Is your facility owned or operated in association with a (or another):
- No**      **Yes**

	1. continuing care retirement community (CCRC)?.	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
	2. hospital?.....	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
	3. nursing home?.....	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
	4. residential care/assisted living facility?.....	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
b. Is it affiliated with a religious organization? .....		<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>
c. Does the owner of your facility own other facilities? .....		<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>

3. a. How many years has this facility been in operation? [Round to nearest whole number. If < one year, record number of months.]      \_\_\_ \_\_\_ Years or \_\_\_ \_\_\_ Months
- b. How many years has your facility been under its current management?      \_\_\_ \_\_\_ Years or \_\_\_ \_\_\_ Months

(1) Total      (2) Occupied

4. a. How many beds does this facility have overall, and how many are occupied today?      \_\_\_\_\_
- i. On average, how many admissions do you have per week      \_\_\_\_\_
- ii. What is the **average** monthly rate paid by your private pay assisted living residents?      \_\_\_\_\_

**The next few questions ask for numbers of residents within certain categories. Please provide your best estimate of these numbers. It is not necessary for you to review records for this information.**

<b>5. How many of all of your current residents are....</b>		<b>Number</b>
<b>a. Resident Age Distribution</b>	<b>1.</b> 0 -18 years old	___ _ _ _
	<b>2.</b> 19-64 years old	___ _ _ _
	<b>3.</b> 65-74 years old	___ _ _ _
	<b>4.</b> 75-84 years old	___ _ _ _
	<b>5.</b> 85 - 94 years old	___ _ _ _
	<b>6.</b> 95 years old and over	___ _ _ _
<b>b. Resident Gender</b>	Male	___ _ _ _
<b>c. Resident Racial Background</b>	<b>1.</b> American Indian or Alaskan Native	___ _ _ _
	<b>2.</b> Asian or Pacific Islander	___ _ _ _
	<b>3.</b> Black	___ _ _ _
	<b>4.</b> White	___ _ _ _
	<b>5.</b> Other	___ _ _ _
<b>d. Resident Ethnicity</b>	of Hispanic Origin	___ _ _ _
<b>e.</b> Incontinent of urine, that is they soak through clothes or underclothes at least twice a week or more or wear incontinence pads (adult diapers)		___ _ _ _
<b>f.</b> Chairfast during the day; that is, they are confined to a chair all or most of the time because of health or physical condition. Includes those in a wheelchair, geriatric chair or armchair in the bedroom.		___ _ _ _
<b>g.</b> Bedfast all or most of the time?		___ _ _ _
<b>h.</b> Mentally retarded or developmentally disabled?		___ _ _ _
<b>i.</b> Use wheelchairs to get around in the facility?		___ _ _ _
<b>j.</b> Have a diagnosis of dementia? Diagnoses include: Alzheimer’s Disease (AD); Senile Dementia; Senile Dementia of the Alzheimer’s Type (SDAT); Organic Brain Syndrome (OBS); Cerebral Arteriosclerosis; Multi-Infarct Dementia (MID); Subcortical Dementia; Binswanger’s Disease; Pick’s Disease; Creutzfeldt-Jakob Disease; Lewy Body Disease; Any other diagnosis that includes dementia, such as “Alcoholic Dementia” or “Parkinson’s Disease with Dementia”; and Dementia not otherwise specified.		___ _ _ _
<b>k.</b> Do not have a diagnosis of dementia, but have short-term memory problems or seem disoriented all or most of the time? This would include, for example, residents who are not able to remember things after a short while, residents who have difficulty remembering where their room is, or difficulty recognizing staff names or faces, and residents who have difficulty organizing their daily routine.		___ _ _ _
<b>l.</b> Require staff attention because of behavior problems?		___ _ _ _
<b>m.</b> Are currently receiving state financial assistance or Medicaid?		___ _ _ _

## II. Facility Staff

The next questions are about the number of paid employees you have on staff. Please be thinking of the **primary** position of your staff; even if a paid staff member fulfills more than one role, assign him or her to a single primary classification. If this is a multi-level facility, only include persons who spend at least one-half of their work time in the portion of the facility that is participating in this project.

### PRESENT TIME

1. How many (1)FULL and (2) PART TIME paid staff are there in each of these positions at THE PRESENT TIME, not including contract workers and other persons not paid by the facility?

*[Ask full and part time for each row before moving onto the next row.]*

Staff Classification	Total Number Paid Staff Now	
	1. Full Time	2. Part Time
a. Administrative Director or Assistant Director		
b. Registered Nurses		
c. Licensed Practical Nurses or Licensed Vocational Nurses		
d. Certified Nursing Assistants or Personal Care Providers		

### LAST 6 MONTHS

2. How many (1)FULL and (2) PART TIME paid staff persons left this position in the LAST SIX MONTHS, not including contract workers and other persons not paid by the facility?

*[Ask full and part time for each row before moving onto the next row.]*

Staff Classification	Total Number Paid Staff Last 6 months	
	3. Full Time	4. Part Time
a. Administrative Director/Assistant Director		
b. Registered Nurses		
c. Licensed Practical Nurses or Licensed Vocational Nurses		
d. Certified Nursing Assistants or Personal Care Providers		

3.	How many total paid hours were worked by <u>contract</u> RN and LPN staff in the LAST WEEK?	_____
4.	How many total paid hours were worked by <u>contract</u> Certified Nursing Assistants or Personal Care Aides in the LAST WEEK?	_____

5.	Do any of the staff I've just asked about work in a portion of this facility that is not participating in this project?	<input type="checkbox"/> 0 No <input type="checkbox"/> 1 Yes <input type="checkbox"/> 9 Not applicable
6.	How often does the assignment of specific residents to direct care workers change?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 2 Less than once a month <input type="checkbox"/> 3 Monthly <input type="checkbox"/> 4 Two to three times a month <input type="checkbox"/> 5 Weekly <input type="checkbox"/> 6 More than once a week
7.	Is daily care provided using a specialized worker perspective, where staff fill specialized roles? An example of this perspective would be having a direct care worker who specializes in giving baths, and is released from other duties.	<input type="checkbox"/> 0 No <input type="checkbox"/> 1 Yes
8.	How many administrators has this facility had in the last 3 years?	_____



9. Do you have a dedicated physical therapist on staff? 0 No 1 Yes

10. Is there a physical therapist to whom you regularly refer residents? 0 No 1 Yes

11. Do you have any arrangements with a pharmacist? 0 No 1 Yes

Describe:

### III. Falls Reporting

1.	How many falls do you have per year?	— —	
2.	How many falls do you have that require medical care each year?	— —	
3.	What is your falls protocol?		
4.	How do you document falls?		
5.	Do you have a falls prevention program in place? ( <i>Describe</i> )	<input type="checkbox"/> No	<input type="checkbox"/> Yes 
6.	Do you have a facility-wide exercise program? ( <i>Describe</i> )	<input type="checkbox"/> No	<input type="checkbox"/> Yes 

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## Who is conducting this project?

The project is conducted by the University of North Carolina (UNC) Collaborative Studies of Long-Term Care, and Research Triangle Institute (RTI).

Dr. Sheryl Zimmerman, a gerontologist and health services researcher, and Dr. Philip Sloane, a geriatrician, are the UNC project investigators. Dr. Edith Walsh, from RTI, is the project director.

All research staff are professionals who are sensitive to the needs and experiences of older adults and their caregivers.

### For further information...

If you have questions about this project, feel free to contact the individuals whose names appear on the back of this pamphlet.

You can also call our study offices at (919) 966-7173.

## This project is one of the Collaborative Studies of Long-Term Care

The Collaborative Studies of Long-Term Care is a program of research to learn more about residential care/assisted living and nursing home settings and their role in the provision of long-term care. More than 4000 residents, staff, and families from 350 facilities across several states have already participated in other projects conducted by this collaborative.

### Project Director

Edith G. Walsh, PhD., R.N.  
Research Triangle  
Institute International

### Principal Investigators

Sheryl Zimmerman, Ph.D.  
Philip Sloane, M.D., M.P.H.  
Program on Aging, Disability, and Long-Term Care  
Sheps Center for Health Services Research  
School of Social Work  
Department of Family Medicine  
University of North Carolina at Chapel Hill

### For further information, please contact:

Madeline Mitchell, M.U.R.P.  
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(919) 966-6074

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*Collaborative Studies of Long-Term Care*

# Preventing Falls in Assisted Living

Falls are a serious problem for older adults. This assisted living residence is participating in a project to learn about falls, what types of things put people at risk for having a fall, and how those risks change over time.

This pamphlet describes this project, and your role if you decide to participate.

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## Background and Purpose

Falls are a serious problem for older adults, including those who live in assisted living residences. In fact, about one-half of the people who live in assisted living residences experience falls. Falls can be a serious problem and sometimes result in injuries.

Many factors cause people to fall, such as bad vision, weak muscles, poor balance, and medications. Also, external factors, such as low lighting or poorly fitting shoes, can cause falls.

The University of North Carolina and Research Triangle Institute are conducting a project to learn more about risk factors for falls, and how those factors change over time.



### The Evaluation Project

This project is being done in four assisted living residences in North Carolina. Researchers will visit each facility three times over one year to assess resident strength, balance, and other factors. Each assessment will take about 40 minutes. Researchers also will review residents' medical charts and documents from healthcare providers, as well as talk to assisted living staff about resident falls risk.

## Who Should Participate?

Assisted living residents will be invited to participate in this project if they are:

- older than 65 years.
- English speaking
- not bed bound.
- not hospice patients.

*Your participation will help us understand how to better prevent falls in assisted living. Also, we will let participants know if they are at high risk of falling.*

### Confidentiality

All information will be kept in strict confidence. Your information will be combined with that of others. It will be impossible to identify an individual's responses in any papers or presentations, since only group totals or averages will be used. Your confidentiality is protected by law.

## **Preventing Falls in Assisted Living Facilities Administrator Interview Guide**

*This interview will start with introductions and informed consent. Respondents will complete a written consent form, and you'll leave a copy with them.*

*Introduce yourselves as follows:*

Hello, my name is \_\_\_\_\_, from the Research Triangle Institute in North Carolina. This is \_\_\_\_\_ who will be taking notes and helping me with other activities. I would like to talk to about the "Preventing Falls in Assisted Living" project. Once we get started, the discussion will last about 60 minutes.

I'll ask you about how the project was implemented, how easy or difficult it was to implement, the impact the project had on the operations of the facility, on your facility staff, and on the residents, and your thoughts about implementing the project on a permanent basis.

We do not expect that any harm will come to you by participating in this interview. However, you can choose not to answer any question and you can choose not to participate in the interview. Also, if at any time during the interview you decide that you do not want to continue, you may stop. Your participation is completely voluntary.

There are no right or wrong answers to our questions. Nothing that you tell me in the discussion will be identified as coming from you personally. Everything we learn from you and use in the study will be kept confidential and notes and recordings will be stored in a locked file cabinet and on a secure computer.

With your permission, we would like to tape record the interview. This will ensure that we capture your words, not our interpretation of them. We will destroy the tapes once our analysis is completed. Is it OK if we tape?

This consent form also explains in more detail what I just told you. It has phone numbers for people you can call if you have any questions. You should keep one of the forms for your records, and I will keep the other one for mine.

Please take a few minutes to review the consent form and sign one copy.

Do you have any questions before we get started?

### **Operational Questions about the Quality Improvement Falls Prevention Program**

- 1 Please describe the quality improvement program as it now exists.
  - a. How was it decided that these would be the components?
  - b. Does it differ than what was envisioned when you first began this project?
    - i. If so, why did it change from what was envisioned?



Which staff were involved? How were staff selected for this project? What was their role? What was your own involvement in the project?

What resident outcome data do you routinely collect or monitor regarding falls, fall-related injuries or risk of falls?

2. Were volunteers involved? For what role(s)? How were they recruited? What supervision did they need or receive? From whom?
3. How does this project relate to your other quality assurance and quality improvement activities? What did your facility do in terms of falls risk assessment or falls prevention prior to this project? How did this project fit into your previous approach?
5. What changes in facility practices were necessary to implement the project? [including record keeping]. Did the project change any of your routine data collection?
6. Where there any costs to the facility associated with participating? Are those costs that would be incurred in the future to continue the program or were they one time costs?

### **Evaluative questions**

7. Do you consider this project a success? Why or why not? What contributed to the success of the project?
8. What aspects of the project do you value most? Which least? Why?  
  
[probes: medication review, reaching physicians to change medications, risk screening, exercise program, referrals to PT, changes to facility environment]
9. What feedback did you get from staff, residents, families and physicians about this project?
10. What aspects of this project did they value the most? Why?  
[probes: medication review, reaching physicians to change medications, risk screening, exercise program, referrals to PT, changes to facility environment]
11. Were there any aspects of the project that they did not like? Why?
12. What changes have occurred in staff or resident outcomes related to this project?
13. What were the challenges to implementing this project? Were they resolved? How? Any changes you would recommend to address these challenges in the future? (at their own facility or in new facilities).
14. How burdensome was it to implement this program in your facility?

15. How important was it to have outside experts to train staff? Or to provide ongoing technical assistance/support?

**Future impact**

16. Will you be sustaining any aspects of the project in this facility? Which ones? Why or why not? [medication review, sending info to MDs suggesting medication changes, falls risk appraisal, exercise program, referrals to PT, training staff]
17. If so, how do you plan to sustain these aspects? [probes: staff have been assigned new tasks or doing something differently, falls prevention will be an ongoing part of their QA/QI activities, will continue to use volunteers- if so, will the current volunteers continue, or will you be recruiting new ones? How do you plan to recruit new volunteers?]
18. Do you anticipate making any modifications to the program? Please describe.
19. Is your chain interested in bringing this program to other facilities? What technical support would other facilities need to implement the program? If you needed technical support, like training by experts, how would you pay for it?

## **Preventing Falls in Assisted Living Facilities Person Implementing the Exercise Program**

*This interview will start with introductions and informed consent. Respondents will complete a written consent form, and you'll leave a copy with them.*

*Introduce yourselves as follows:*

Hello, my name is \_\_\_\_\_, from the Research Triangle Institute in North Carolina. This is \_\_\_\_\_ who will be taking notes and helping me with other activities. I would like to talk to about the "Preventing Falls in Assisted Living" project. Once we get started, the discussion will last about 45 minutes.

I'll ask you about the types of residents participating in the exercise program; what changes were observed in the participants; what worked well; what did not work well; the barriers to resident participation; and any recommendations you have for changes to the Preventing Falls in Assisted Living program.

We do not expect that any harm will come to you by participating in this interview. However, you can choose not to answer any question and you can choose not to participate in the interview. Also, if at any time during the interview you decide that you do not want to continue, you may stop. Your participation is completely voluntary.

There are no right or wrong answers to our questions. Nothing that you tell me in the discussion will be identified as coming from you personally. Everything we learn from you and use in the study will be kept confidential and notes and recordings will be stored in a locked file cabinet and on a secure computer.

With your permission, we would like to tape record the interview. This will ensure that we capture your words, not our interpretation of them. We will destroy the tapes once our analysis is completed. Is it OK if we tape?

This consent form also explains in more detail what I just told you. It has phone numbers for people you can call if you have any questions. You should keep one of the forms for your records, and I will keep the other one for mine.

Please take a few minutes to review the consent form and sign one copy.

Do you have any questions before we get started?

**Consent process**

**45 minutes to one hour for interview**

## Introduction

1. What is your role in the exercise and falls prevention program?
2. What is your background? Volunteer or staff member?
3. How did you get involved in the program?
4. Who else in the facility did you interact with in conducting this program?  
What was the nature of the interaction?

## Program Participants

8. What types of residents participated in the exercise program?

Probes: Frail  
Mobility Problems  
Fairly Healthy or active  
Etc.

9. Describe the frequency of attendance.

Same people come on regular basis  
each time  
A few new people attend each time

10. Were there people who attended the exercise program that you felt were inappropriate for the program? How did you handle those situations?

11. What kind of difficulties did participants experience?

Probes:  
getting to the location  
some exercises easier to do than others  
stamina issues  
anxiety about participating

12. What changes were observed in the participants?

Probes: stamina increased  
balance improved  
people seemed to enjoy  
level of interest in exercise increased / seemed to enjoy it  
flexibility improved  
effect on socialization  
increased level of independence

## **The program**

13. How often do you have the exercise program? How long does session last?
14. Who trained you in doing the program? Does it require a lot of training to be able to oversee this program? What type of experience and training is necessary?
15. Did you receive any ongoing support from the consulting physical therapist in conducting the exercise program? What type of support?
16. What things worked particularly well during the program?

Probes: did any one exercise work better than another  
Schedule / location  
Getting people to the location  
Participation level  
Education component (will there be one)

17. What things did not work well?

Probes: did any one exercise work better than another  
Schedule / location  
Getting people to the location  
Participation level  
Education component (will there be one)

18. What types of barriers were there to residents' participation?
19. What support would other facilities need to implement the exercise program?
20. Do you feel you could train someone else here at the facility to do the exercise program?
21. How should assisted living facilities identify and encourage other people to conduct these programs?
22. Any recommendations for change.

## **Wrap up**

24. Anything else

## **Preventing Falls in Assisted Living Facilities Medication Review Staff**

*This interview will be conducted with whoever conducted any aspects of the medication review or follow-up with physicians. The interview will start with introductions and informed consent. Respondents will complete a written consent form, and you'll leave a copy with them.*

*Introduce yourselves as follows:*

Hello, my name is \_\_\_\_\_, from the Research Triangle Institute in North Carolina. This is \_\_\_\_\_ who will be taking notes and helping me with other activities. I would like to talk to about the "Preventing Falls in Assisted Living" project. Once we get started, the discussion will last about 60 minutes.

I'll ask you about the medication review process, the computer program you used as part of the resident medication review process and about the process for following up with physicians including what worked well and what did not work particularly well.

We do not expect that any harm will come to you by participating in this interview. However, you can choose not to answer any question and you can choose not to participate in the interview. Also, if at any time during the interview you decide that you do not want to continue, you may stop. Your participation is completely voluntary.

There are no right or wrong answers to our questions. Nothing that you tell me in the discussion will be identified as coming from you personally. Everything we learn from you and use in the study will be kept confidential and notes and recordings will be stored in a locked file cabinet and on a secure computer.

With your permission, we would like to tape record the interview. This will ensure that we capture your words, not our interpretation of them. We will destroy the tapes once our analysis is completed. Is it OK if we tape?

This consent form also explains in more detail what I just told you. It has phone numbers for people you can call if you have any questions. You should keep one of the forms for your records, and I will keep the other one for mine.

Please take a few minutes to review the consent form and sign one copy.

Do you have any questions before we get started?

### **Operational questions**

1. Please describe the medication review process, and your role in it.
2. Please describe the medication review process that was in place prior to this project. How does it differ from the medication review process used in this project?

3. What is your role in quality monitoring and improvement at this facility? Did that change as a result of this project?
  4. Who trained you to do the medication review and follow-up task? What training did you require for this task? What experience did you have in this area, before beginning the project? Did you receive any ongoing support from the consulting pharmacist in conducting this task? What type of support?
  5. How long does it take to complete the medication review? About how many medication reviews did you do in the course of the project? About what proportion of these were rescreenings due to a change in medication regimen.
  6. How did you know if a resident needed a medication review? (new residents and changes in medication regimen)
  7. How often did you find medication risk factors for falls? Were there certain medications or combinations of medications or dosages that came up frequently? Certain types of residents that were most likely to have falls risk factors related to their medications?
1. How often did you need to contact a physician about potential falls risk factors? About how many different physicians did you have to contact? Were they physicians you had contact with before this project? How did they react when you contacted them about potential falls risk factors associated with their prescribed medication regime? Did this change over time- i.e., as you called a physician about a second, third or additional resident changes?
  2. About what percent of the time did physicians respond at all to the information that you sent them?
  3. About what percent of the time did physicians make a change in resident medications in response to the information that you sent?
  4. About what percent of the time did physicians let you know they had received the report but did not plan on making any changes?
  5. Who explained any changes to residents? Did you communicate these changes to anyone else in the facility? Who? How?

### **Evaluative questions**

1. Overall, do you consider the medication review system successful? Why or why not? What contributed to the success of the project? What obstacles were there to success?
2. What benefits to residents, staff or the facility have you seen from this aspect of the project? How important do you feel this task is to resident well-being?

3. What challenges were there to
  - a. implementing the medication review process?
  - b. Communicating with physicians about falls risks associated with medications
  - c. Were there other aspects that were challenging?
4. Did you overcome some of these challenges? How?
5. How well were you trained in conducting this aspect of the project? Did you have adequate support from the consulting pharmacist in conducting this aspect of the project? What additional support needs did you have, if any?
6. How well did the PC-based medication review program work? What are its strengths? What problems did you encounter in using it? Do you have any recommendations for improving it?
7. What impact did doing this task have on your overall workload? How much of that was related to training and start-up vs ongoing implementation? What were the most time consuming components of these tasks? Do you have any suggestions for how to streamline the process or make it more efficient?
8. How well did the approach to informing physicians work? What recommendations do you have to improve this process? What support or training did you need to conduct this component?

## **Future**

1. Do you expect to continue using this medication review program and alerting physicians to any possible falls risk factors?
2. What training or ongoing support would your facility need to maintain this program?
3. Could you train staff at another facility in your chain in the medication review and follow-up tasks?
4. Do you have any other recommendations to improve this program?



## **Preventing Falls in Assisted Living Facilities Resident Interview**

*Protocol for identifying residents to interview: RTI International staff will ask the exercise leader and / or the facility intervention team to nominate residents for interview based on their levels of participation in the exercise program. A total of 6 residents in each facility will be interviewed. Will we attempt to vary the resident interviews by their risk for falls.*

*This interview will start with introductions and informed consent. Residents will complete a written consent form, and will receive a copy.*

Hello, my name is \_\_\_\_\_, from the Research Triangle Institute in North Carolina. This is \_\_\_\_\_ who will be taking notes and helping me with other activities. I would like to talk to about the “Preventing Falls in Assisted Living” project. Once we get started, the discussion will last about 30 minutes.

I’ll ask you for your thoughts about the Preventing Falls in Assisted Living Project, including the exercise program; what you liked and disliked about it; the impact the program had on you; your reasons for participating or not participating, your interest in continuing in any other programs like this one if it’s offered here; and your recommendations for improvements.

We do not expect that any harm will come to you by participating in this interview. However, you can choose not to answer any question and you can choose not to participate in the interview. Also, if at any time during the interview you decide that you do not want to continue, you may stop. Your participation is completely voluntary.

There are no right or wrong answers to our questions. Nothing that you tell me in the discussion will be identified as coming from you personally. Everything we learn from you and use in the study will be kept confidential and notes and recordings will be stored in a locked file cabinet and on a secure computer.

With your permission, we would like to tape record the interview. This will ensure that we capture your words, not our interpretation of them. We will destroy the tapes once our analysis is completed. Is it OK if we tape record the interview?

This consent form also explains in more detail what I just told you. It has phone numbers for people you can call if you have any questions. You should keep one of the forms for your records, and I will keep the other one for mine.

Please take a few minutes to review the consent form and sign one copy.

Do you have any questions before we get started?

## **Introduction**

1. Do you participate in the {Falls Intervention Project or name of project}? What aspects of the project did you participate? Probes: medication review, exercise, PT, new special equipment or equipment checked, changes to how room was set up.
2. Why did you decide to participate?
3. Were any of your medications changed because they created a risk for falling? If so, how did the change affect you?

Probes;

Less sleepy

Less dizzy

More alert

4. Did anyone come into your room and evaluate it for safety? What recommendations for changes did they make?
5. What changes did you allow them to make? What benefits did you notice from the changes?

## **The Exercise Intervention**

6. Are you involved in the group exercise program?
7. How often do you participate?

Probes:

Frequency – every time it's scheduled

Once a week

Only went a few times and quit

8. What effects whether or how often how you participate?

Probes: Feeling bad, not as interested as time goes on, not dressed in time, conflicted with other plans, didn't like it.

9. What would make it easier or more likely that you would participate more often?

10. What do you like or not like about the exercise program?

Probes: like the exercises  
find it helpful / enjoyable  
look forward to it  
socialization  
Gives confidence  
The exercises themselves  
Education – how to use assistive devices??  
time of day  
Length of time required  
Location  
Types of exercises  
Afraid you'll lose your balance or fall while exercising

Before this project did you do participate in any kind of regular exercise? If so, what types? On your own or in a class? Have you continued with that exercise routine in addition to the exercise program?

11. If participated in an organized exercise program before: How is this one [the project's] different from the one you in which you participated before?

Probes:  
Types of exercises / level of intensity  
Times of day / frequency

*Note: we need a clear way of distinguishing the intervention exercise program from any other exercise program that may have existed before.*

12. Were you referred to a physical therapist? If so, why were referred to the physical therapist? Did you go? If not, what kept you from going to see the physical therapist?

13. How many visits did you have? Where did you see the physical therapist? How did seeing the physical therapist help you?

14. Did you have any problems going to physical therapy? What kinds of problems did you have?

Probes: paying for it  
getting an appointment  
transportation to PT

15. What effect has the exercise program or physical therapy had on you?

Probes:

- improved balance
- improved confidence
- increased strength or stamina
- socialization
- has helped improve your health

16. What are you doing differently as a result of participating in the project?

Probes;

- involved in more activities
- fall less

17. If the facility continued to offer the exercise program would you continue to participate? Why or why not?

18. This project involved reviewing medications, evaluating your room for safety and exercise classes and physical therapy. Do you have any suggestions for improving any of these activities?

**Wrap up**

19. Anything else?

**Person Implementing the Exercise Program – NICE !**  
**Draft 2/12/07**

**Introduction**

**Consent process**

**45 minutes to one hour for interview**

**Introduction**

1. What is your role in the exercise and falls prevention program?
2. What is your background? Volunteer or staff member?
3. How did you get involved in the program?
4. Who else in the facility did you interact with in conducting this program?  
What was the nature of the interaction?

**Program Participants**

8. What types of residents participated in the exercise program?

Probes: Frail  
Mobility Problems  
Fairly Healthy or active  
Etc.

9. Describe the frequency of attendance.

Same people come on regular basis  
each time  
A few new people attend each time

10. Were there people who attended the exercise program that you felt were inappropriate for the program? How did you handle those situations?

11. What kind of difficulties did participants experience?

Probes:  
getting to the location  
some exercises easier to do than others  
stamina issues  
anxiety about participating

12. What changes were observed in the participants?

Probes: stamina increased  
balance improved  
people seemed to enjoy  
level of interest in exercise increased / seemed to enjoy it  
flexibility improved  
effect on socialization  
increased level of independence

### **The program**

13. Did you have an exercise program at the facility prior to this project? If so, how did it differ from this one? THIS IS MORE FOR THE ADMINISTRATOR TO ANSWER, NOT THIS PERSON.

Probes: attendance  
types of residents  
frequency / number of days or times offered

14. How often do you have the exercise program? How long does session last?

15. Who trained you in doing the program? Does it require a lot of training to be able to oversee this program? What type of experience and training is necessary?

16. Did you receive any ongoing support from the consulting physical therapist in conducting the exercise program? What type of support?

17. What things worked particularly well during the program?

Probes: did any one exercise work better than another  
Schedule / location  
Getting people to the location  
Participation level  
Education component (will there be one)

18. What things did not work well?

Probes: did any one exercise work better than another  
Schedule / location  
Getting people to the location  
Participation level  
Education component (will there be one)

19. What types of barriers were there to residents' participation?
20. What support would other facilities need to implement the exercise program?
21. Do you feel you could train someone else here at the facility to do the exercise program?
22. Any recommendations for change.
23. Did you enjoy doing the exercise program?

**Wrap up**

24. Anything else