

ICPSR 4248

**ACTIVE (Advanced Cognitive
Training for Independent and Vital
Elderly), 1999-2001 [United States]**

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Form 810 AN2 Individual Assessment, Part 2
Questionnaire

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ACTIVE

Question by Question Specifications Guide for Administration of the Individual Assessment Part II (2nd Annual Post-Test) Measurements Form # 810

I. Purpose

The measures in the Individual Assessment Part II (2nd Annual Post-Test) are designed to measure aspects of the subject's functional status, speed of processing, mobility, and health status. The results of the measures completed at this visit will be compared to results obtained at earlier points in the study.

II. Study Sample and Administration

Second Annual Post-Testing will be completed on all ACTIVE subjects still participating in the trial. The ideal order of administration of these 2nd Annual Post-Test Measures is as follows:

1. Individual Assessment Part I
2. Take-Home Questionnaire
3. Individual Assessment Part II
4. Group Assessment Measures

However, this order is not strict. You may need to alter the order of administration to accommodate either subject or Field Site scheduling conflicts.

III. Administration Protocol

The following items should be assembled in advance of the subject's appointment time.

A. Materials

- Individual Assessment Part II (2nd Annual Post-Test) Form #810 with ID label attached
- Digit Symbol Substitution & Digit Symbol Copy Form # 411a with ID label attached
- Digit Symbol Substitution & Digit Symbol Copy Data Coding Form #411 with ID label attached
- OTDL Data Form # 422,
- QxQ Specifications Guide for Administration of the Individual Assessment Part II (2nd Annual Post-Test)
- QxQ Specifications Guide for Administration of the OTDL

B. Equipment

- Omron Automatic Digital Blood Pressure and Pulse Monitor, Model # HEM - 737
- Two OMRON blood pressure cuffs: standard and large adult sizes
- Right angle Handi-Stat wood piece
- 8 foot wood folding carpenter's ruler
- Luekopor medical paper tape
- Large digital display scale with extra wide base
- Germicidal handi-wipes
- Paper towels
- Jamar Adjustable Hydraulic hand dynamometer
- Electronic timer
- Digital stopwatch
- Timed IADL Administration Kit
- OTDL Administration Kit
- Spare batteries should be carried for all battery operated equipment
- Digit Symbol Substitution Task Scoring Stencil

C. Preparation

1. Testers must be certified as an ACTIVE Tester. Certification status must be current.
2. Ideally, all Individual Assessment Part II Measurements can be completed in one general exam room or private workstation. The area selected must allow for private, confidential testing and interviewing with minimal background noise.
 - To complete the height measurement, a wall space or door jam space without baseboard or threshold is required. The floor must be free of carpeting.
 - To complete the weight measurement, a hard, flat, uncarpeted floor space large enough to accommodate the digital scale will be required.
3. In advance of the subject's appointment time, testers should assemble a packet with all forms necessary for completion of the Individual Assessment Part II (2nd Annual Post-Test) Measurements. All forms should be pre-labeled with the subject's full study ID Labels.
4. Prior to the start of measurement, the tester must remove phone book, digital stopwatch, coins, the three food cans, and the two medicine containers from the Timed IADL kit. Close up the kit so the food array in the box is not visible to the subject.
5. Prior to the start of the session, the tester should remove items and question cards from the OTDL Kit. Organize items in precise order of use for testing.

6. When you greet the subject, note clothing compatibility for the blood pressure measurement. If the shirt or sweater seem to be incompatible, ask the subject to change shirts.
7. Prior to the start of the session, tester should set-up and test Omron B/P & Pulse Monitor equipment.

IV. Important Matters related to Standardization of the Data Collection Methods

Whenever many individuals are responsible for data collection, the possibility of observer bias exists. Simply put, this means that differences in the technique used to collect the data can be responsible for variations in the results. Observer bias can also occur in the collection of physiologic measures if a different technique is used or simply by being casual or unfamiliar with the protocol.

A great deal of time and effort has been spent developing protocols that accurately measure physical and functional capabilities. Each protocol has been written with the principles of accuracy, consistency, safety and comfort in mind. It is essential that **ALL TESTERS ADHERE TO THE PROTOCOLS AS WRITTEN**, since even a seemingly unimportant omission or variation in technique can make a significant difference in the measurements recorded.

V. Section by Section Review

Section A. Identifying Information

Items A1. – A4. should be completed by the ACTIVE tester prior to the start of the measurement.

- A1.** Study ID: Affix the subject's study ID label in the space provided.
- A2.** Visit #: This item may be pre-coded. Various forms will be used at the time of the Individual Assessment Part II (2nd Annual Post-Test) (Visit # I4). The code for Individual Assessment Part II (2nd Annual Post-Test) is I4.
- A3.** Form Version: Be sure the form version on the form matches the current approved version.

GENERAL INTRODUCTION: Read the General Introduction verbatim to the subject.

Section B: MDS

1. Self Performance of Instrumental Activities of Daily Living (IADL)

a. Description

The intent of these items is to examine the areas of function that are most commonly associated with independent living. The MDS provides a self-report of a subject's ability to perform these common tasks.

b. Administration

The subject is questioned/interviewed directly about his or her performance of normal activities of daily life around the home or in the community in the last 7 days. There are 19 activity categories in the IADL scale, and there are two questions the tester must code for each of the activity categories. Review Section B, Part 1 of the instrument carefully. Note the 19 activity categories and the 2 questions that must be answered. Although the tester should complete the MDS as an interview, they must also use their own observations while completing the assessment. If a subject's behavior is not congruent with a subject's self report, the tester should re-ask the question as a prompt prior to coding the activity.

Below find the definition for each of the 19 activity categories.

c. Definitions

- (a) **Planning meals, reading recipes, assembling ingredients** — How meals are planned (e.g., thinking ahead about the week's schedule, menu planning, reading recipes and gathering required ingredients, noting what is missing.)
- (b) **Setting out food and utensils** — How meals are assembled, including setting out packaged prepared food and utensils. (e.g. setting the table with proper utensils).
- (c) **Cooking** — How meals are cooked (e.g., baking, heating up leftovers, frying, and warming frozen dinners).
- (d) **Doing dishes, dusting, making bed, tidying up** — How clean up of dishes, rooms (e.g., making bed, changing bed linen, dusting furniture, sweeping/vacuuming floors).
- (e) **Laundry** — Washing of clothes, sheets, towels, etc. Someone else transporting a subject's laundry from her/his apartment/room to the laundry machine is not included.
- (f) **Handling money, writing checks** — How money and checks are handled and paid out as needed. This does not include going to the bank to do banking or using bank machines.
- (g) **Ensuring that all bills are paid on time** - How bill due dates are monitored and adhered to.
- (h) **Balancing checkbook** - How additions and subtractions are entered into the checkbook, including balancing the amount.

- (i) **Keeping household expenses balanced** — How decisions are made about household expenses based on resources.
- (j) **Keeping track of doctor appointments** - How health care appointments are remembered and adhered to.
- (k) **Remembering to take medications on time and as prescribed by doctor** - How medication schedules are complied to. (e.g., remember to take medicines, including pills, injections, eye drops, and ointments at specified times.)
- (l) **Opening medicine bottles, taking own medications** - How oral medications are prepared for administration and actually administered. (e.g. opening bottles, measuring liquids, scoring pills.)
- (m) **Giving self injection, applying ointments, changing bandages** -
- (n) **Looking up phone numbers - either in phone books or by call to telephone information operator** - How needed phone numbers are obtained.
- (o) **Remembering often called numbers without having to look them up** - Recalling frequently called numbers, and dialing them without first looking them up. (e.g. family or friends phone numbers.)
- (p) **Answering phone when someone calls** - How phone is answered and handled. (e.g. finding the phone when ringing, terminating unwanted solicitations.)
- (q) **Hanging up at end of call** - How the line is terminated at the end of a conversation. (e.g. pressing the “off” button on a cordless, returning the receiver to its cradle)
- (r) **Shopping for food and household items** - How food or household items are obtained. (e.g. creating a list of sorts of needed items, determining where to go for supplies, getting the desired supplies purchased and into home.)
- (s) **Travel by vehicle to go to places beyond walking distances** - How travel occurs beyond reasonable walking distance. (e.g. arranging for and/or taking a taxi, bus, car, ride with a friend.)

d. Coding

There are two questions the tester must ascertain from the subject for each of the activities in the Self Performance of IADL scale.

The tester must select a code for each of the two questions for the subject's performance for each of the 19 activities over the past 7 days by circling the code number in the appropriate column.

Question #1: In the last 7 days, how much of the activity did you do on your own?

There are five coding options available for the first question. Choose the best option from the following list.

- (1) **Did all on own:** Use this code if the activity occurred at least once during the past seven days and every time the activity occurred, it was done completely by the

subject.

Do not use this code, if the activity did not occur in the last seven days OR if the subject received any help with this activity in the last seven days, even if the help was not needed and even if the help was only given on one occasion.

- (2) **Some help some of the time:** Use this code if the activity occurred one or more times during the past seven days and at least once, but not every time, the subject received help.

Do not use this code if the activity did not occur in the last seven days OR if the subject received help every time the activity occurred.

This code is a bit more complicated when an activity includes more than one sub-task; for example, ‘giving self injections, applying ointment, changing bandages.’ For these activity categories, the tester must inquire about the actual sub-tasks that did occur in the last seven days. Use this code if on any of these occasions, but not all of the occasions, the subject performed any of the sub-tasks on his/her own. The following example is provided as an illustration:

On Monday morning, Mrs. Smith applied her own ointment and her husband gave her an injection. On Thursday morning Mrs. Smith applied her own ointment and received no injection. This qualifies as ‘*some help, some of the time*’ because on one occasion Mrs. Smith received help but on another occasion she did not. Whether or not Mrs. Smith is able to give an injection to herself does not matter. Use this code as long as on one occasion, but not every occasion, Mrs. Smith performs the sub-task that does occur on her own.

- (3) **Help all of time:** Use this code if the activity occurred at least once during the past seven days and at every occasion the individual received help, but still did part of the activity on at least one occasion.

Do not use this code if the subject was not involved in the performance of the activity in the last seven days.

Do not use this code if the activity did not occur in the last seven days.

This code is also a bit more complicated for those activities that include more than one sub-task. Using the same activity of ‘giving self injections, applying ointments, changing bandages’: as with code 2, the tester must inquire thoroughly about the specific occasions when these sub-tasks occurred in the past seven days. Use this code, if on all of these occasions the subject received help from others performing any of the sub-tasks, but participated in performance of other sub-tasks on at least one occasion. Here is another example:

On Monday morning Mrs. Smith applied her own ointment and her husband gave her an injection. On Thursday morning Mrs. Smith’s husband gave her an injection and applied the ointment. This is ‘*help all of the time*’ because Mrs. Smith received help on both occasions but she did perform one of the sub-tasks on one occasion. It should be noted that even if Mrs. Smith did not completely perform a sub-task, but had helped in a sub-task (e.g. had taken the lid off the ointment bottle), then this code would still apply.

- (4) **Fully performed by others:** Use this code if the activity occurred at least once during the past seven days, and on every occasion it was performed completely by

someone other than the subject.

Do not use this code if the subject ever performed or ever helped to perform the activity in any way on any occasion.

Do not use this code if the activity did not occur in the last seven days.

- (5) **Activity not performed by you or others** Use this code if the activity did not occur even once during the past seven days by either the subject or any individual on behalf of the subject.

Question #2: How difficult was it (or would it have been) to do on your own?

If the subject reports in Question 1 that s/he was involved in performance of the activity over last seven days, (coded 1, 2, or 3) ASK: “*How difficult was it to do on your own?*”

If the subject reports in Question 1 that s/he was not involved in the activity in last seven days (e.g., others did it or there was no need to do it; coded 4 or 5), ASK: “*How difficult would it have been to do on your own?*”

There are three coding options available for the second question. Choose the best option from the following list.

- (1) **Not difficult:** Subject did not have difficulty, or would not have difficulty completing the activity or sub-task(s) on their own.
- (2) **Some help needed or I am slow, or I became fatigued:** Subject did require or would require some help, or was slow in performing task(s) or became fatigued.
- (3) **Great difficulty:** Subject had great difficulty or would have great difficulty performing all sub-tasks on their own.

2. Self Performance of Activities of Daily Living (ADLs): Dressing and Personal Hygiene and Bathing

a. Description

The intent of the Self Performance of ADL Performance Scale is to record the subject’s self-care performance in activities of daily living (i.e., what the subject actually did for himself or herself and/or how much verbal or physical help was required by caregivers) during the **last seven days**. CAUTION: Two coding schemes are used for these items, one for the activities related to dressing and personal hygiene (items a – j) and another for activities related to bathing (k – o). The coding rules for scoring these ADLs appear in the data form.

b. Administration

A subject's ADL self-performance may vary from day to day, or even within the 24 hour period. There are many possible reasons for these variations, including mood, medical condition, relationship issues (e.g., willing to perform for a home caregiver he or she likes), and medications. The responsibility of the person completing the assessment, therefore, is to capture the total picture of the subject's ADL self-performance over the seven day period, 24 hours a day.

In order to accomplish this, it is necessary to ask the subject to think about the last 24 hours, then consider the last 7 days. Ask about variations during the week; when help was available and when it was not. Ask questions pertaining to all aspects of the ADL activity as defined in this guide. Since accurate coding is important, be sure to consider each activity's definition fully.

The wording used in each coding option is intended to reflect real-world situations, where slight variations are common. Where variations occur, the coding ensures that the subject is not assigned to an excessively independent or dependent category. For example, by definition, codes 1, 2, 3, and 4 in the Dressing and Personal Hygiene scheme (Independent, Supervision, Limited Assistance, and Extensive Assistance) permit one or two exceptions for the provision of heavier care. This is clinically useful and increases the likelihood that tester will code ADL self-performance items consistently and accurately.

c. Definitions for Dressing and Personal Hygiene

ADL SELF-PERFORMANCE — Measures what the subject actually did (not what he or she might be capable of doing) within each ADL category over the last seven days according to a performance-based scale.

- (a) **Picking out and gathering clothes** - How clothing is selected and gathered, including any prosthesis.
- (b) **Dressing or undressing lower part of body** - How socks, shoes, pantyhose, underwear and pants are put on and taken off (not including fastening, tying or buttoning).
- (c) **Tying/untying shoes, fastening/unfastening pants** - How shoes and pants are fastened and unfastened.
- (d) **Putting on or taking off shirt/blouse, dress, bra** - How upper body clothing is put on and taken off (not including fastening, tying or buttoning.)
- (e) **Fastening/unfastening bra, Buttoning or unbuttoning, Zippering or unzipping** - How upper body clothing is fastened.
- (f) **Gathering wash cloth, soap, shaving kit, makeup, toothbrush etc** - How personal hygiene supplies are gathered, including adaptive equipment.
- (g) **Washing and drying perineum** - How the perineum is washed and dried (the area occupied by urogenital passages and the rectum). For perineum, the words private parts or groin can be substituted. Be certain that it is clear what is being discussed.
- (h) **Washing and drying face** - How the face is washed and dried

(i) **Brushing teeth, Shaving face, Make up application** - How natural or artificial teeth are cared for shaving, and make-up application.

(j) **Combing/brushing hair** - How hair is groomed and arranged.

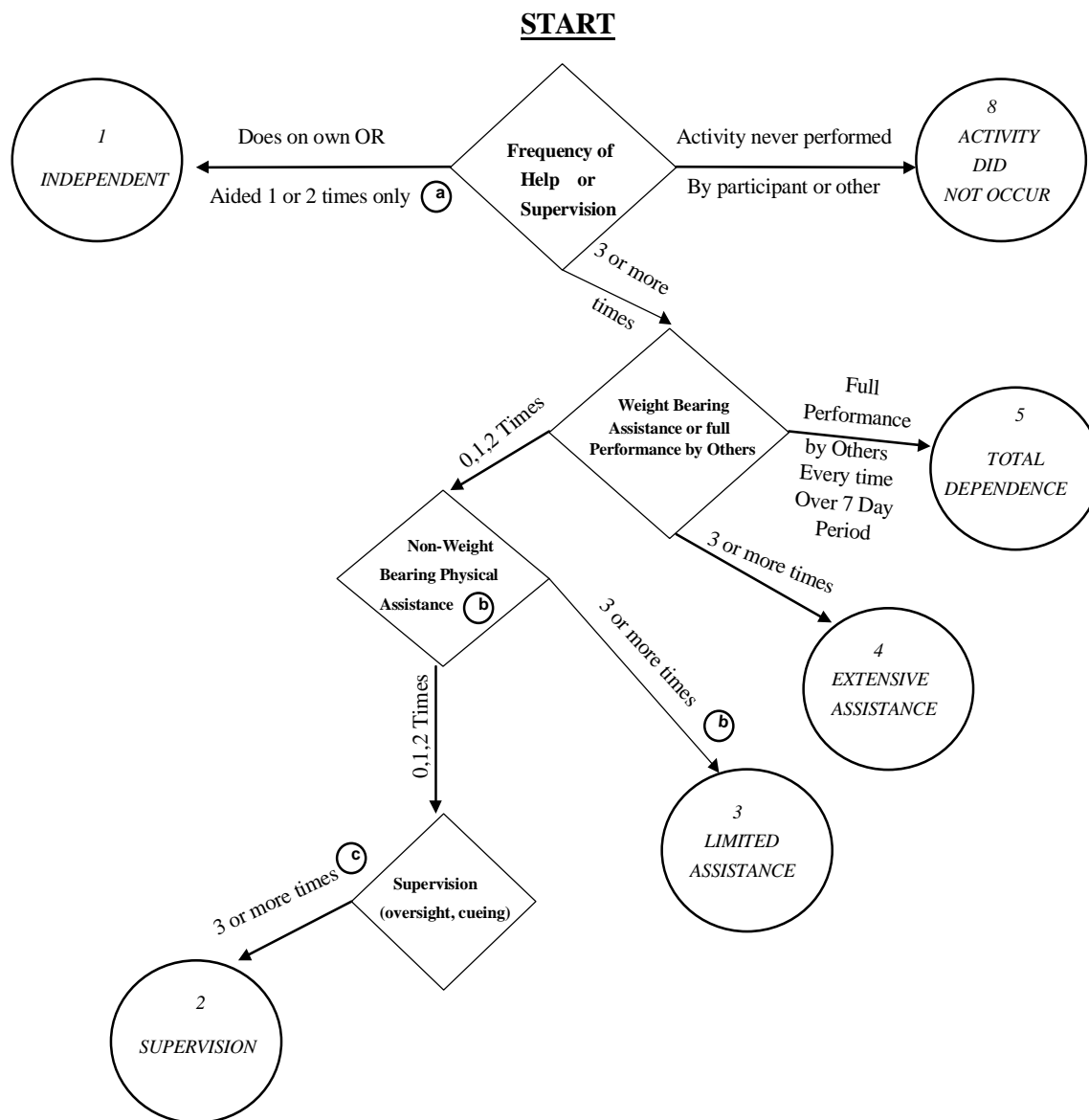
(d) **Coding for Dressing and Personal Hygiene**

For the ADL categories of Dressing and Person Hygiene (items a-j) code the appropriate response for the subject's actual performance during the past seven days. Circle the code in the appropriate column. Consider the subject's performance during 24 hours over the last week. For Dressing and Personal Hygiene, use the coding scheme provided in the form. The Dressing and Personal Hygiene coding scheme is as follows.

CODE	DESCRIPTION	DEFINITION
(1)	INDEPENDENT	No help or caregiver oversight -or- caregiver help/oversight provided only one or two times during the last seven days
(2)	SUPERVISION	Oversight, encouragement, or cueing provided three or more times during last seven days -or- supervision (3 or more times) plus physical assistance provided only one or two times during last seven days.
(3)	LIMITED ASSISTANCE	Subject highly involved in activity, received physical help in guided maneuvering of limbs or other non-weight-bearing assistance on three or more occasions -or- limited assistance (3 or more times) plus more help provided only one or two times during last seven days
(4)	EXTENSIVE ASSISTANCE	While the subject performed part of activity over last seven days, help of following type(s) was provided three or more times: <ul style="list-style-type: none"> • Weight-bearing support provided three or more times • Full caregiver performance of activity (3 or more times) during part (but not all) of last seven days
(5)	TOTAL DEPENDENCE	Full caregiver performance of the activity during entire seven-day period. Complete non-participation by the subject in all aspects of the ADL definition.
(8)	ACTIVITY DIDN'T OCCUR DURING THE ENTIRE 7-DAY PERIOD	Over the last seven days, the ADL activity was not performed by the subject or caregiver. E.g., <u>the particular activity did not occur at all.</u>

The flow-diagram on the following page illustrates the decision rules testers should use to determine the proper coding for the Dressing and Personal Hygiene items.

SCORING ADL SELF PERFORMANCE



- a. Can include one or two events where received supervision, non-weight bearing help, or weight bearing help. NOTE: If only one or two events, score for the least dependent (Example 1: hair combed or brushed twice, once by hair dresser and once by subject would receive a score of 1, Independent. Example 2: hair combed or brushed only once by the hairdresser would receive a score of 5, Total Dependence).
- b. Can include one or two episodes of weight bearing help--e.g., two events with Non-weight bearing plus two of weight bearing would be coded as a "2".
- c. Can include one or two episodes where physical help received--e.g., two episodes of supervision, one of weight bearing, and one of non-weight bearing would be coded as a "1".

e. Definitions for Bathing Activities

SELF-PERFORMANCE OF BATHING ACTIVITIES — Measures what the subject actually did (not what he or she might be capable of doing) for each **bathing activity** over the last seven days according to the performance-based scale below.

- (k) **Gathering soap, towels, shampoo** - How shower/tub supplies are gathered, including adaptive equipment.
- (l) **Getting in and out of tub/bath** - How the subject manages getting in and out of the tub/shower, including the use of adaptive equipment.
- (m) **Washing/drying: lower extremities excluding perineum** - How lower extremities are washed and dried, including the use of adaptive equipment.
- (n) **Washing/drying hair** - How hair is washed & dried excluding combing & grooming.
- (o) **Washing/drying upper extremities** - How upper extremities are washed and dried (excluding the back).

f. Coding for Bathing

Remember, there is a different coding scheme for bathing. It has the same number of response alternatives, and the alternatives have the same feel in terms of the level of dependency, but the words and definitions are different. For the coding scheme for dressing and personal hygiene, we rely on the fact that there are multiple events during any given period. This differs significantly for the ADL bathing activities. Bathing is the only ADL where, over a weeks time, there may be only 1 or 2 events. Therefore, a separate coding scheme has been established for the bathing items (k-o). For example, in the bathing scheme, if you code a subject as independent in bathing, they must do the activity on their own EVERY time. Review the bathing coding scheme closely.

For the ADL category of Bathing (items k-o), code the appropriate response for the subject's actual performance during the past seven days. Circle the code in the appropriate column. Consider the subject's performance during 24 hours over the last week. For Bathing, use the coding scheme provided in the form. The Bathing coding scheme is also included below.

CODE	DESCRIPTION	DEFINITION
(1)	Independent	Did on own
(2)	Supervision	Oversight help only
(3)	Limited Assistance	Received assistance in transfer only
(4)	Assistance	Received assistance in part of bathing self.
(5)	Total Dependence	Total dependence
(8)	Activity didn't occur	Activity did not occur at all.

Section C. Timed IADL

1. Description

The phenomenon of age-related slowing is the best documented and least contested of any in the field of aging and cognition. The Timed IADL task consists of five common activities of daily living, all of which involve searching for, and processing information regarding, target objects or information. All activities are timed to facilitate a measurement of the speed of information processing and visual search while engaging in these everyday activities.

The measures are designed to assess the effects of the cognitive interventions on functional outcomes. The five simple tasks are basic to activities of daily living and are easily amenable to being timed. They come from the domains of telephone communication, shopping, financial abilities, medication usage, and nutrition evaluation. The brevity of the tasks, and the ease with which they can be standardized across sites, and used in repeated testing situations, were important considerations in their choice.

2. Materials needed

All items needed for the administration of the Timed IADLs are packaged in a container suitable for carrying. This kit includes:

- Phone book (Timed IADL Task A)
- Coins (3 quarters, 4 dimes, 3 nickels, & 4 pennies) (Timed IADL Task B)
- Three cans of food (Timed IADL Task C)
- Array of food items (Timed IADL Task D)
- Two medicine containers (Timed IADL Task E)
- Digital stopwatch (All Timed IADLs)

3. Administration

This guide provides background information on, and procedural details relevant to, the 5 Timed IADL tasks. Testers administering this assessment must master this protocol. Since performance on these activities is timed, the tester should ensure that the subject is focused on the task at hand.

The time taken to perform an activity should be recorded from the stopwatch in the following format: minutes: seconds: hundredths of seconds. For example, a task taking one minute thirty two and forty eight hundredths seconds would be simply recorded as 1:32:48 in the appropriate space.

NOTES AND CAUTION:

- Since all five tasks involve the use of near vision, and some involve reading small print, make sure that the subject is wearing the optical correction (reading glasses) that they typically wear for near vision activities prior to the start of the Timed IADL tasks.
- Always check to ensure that the digital stopwatch has been reset to zero and starts properly at the start of timing each of the Timed IADL activities. If it hasn't, you must start the task over again. Be sure to have the timer ready before starting each activity.
- Since the correct answers are on your data form, make sure that the subject cannot see your data form at any time during testing.

Task A Finding a Telephone Number

Description of task

The subject is instructed that s/he will be given a name of an individual whose number s/he should look up in the phone book and say aloud. For example, at this assessment, the subject is given the name Steven N. Nelson (the tester then spells out NELSON). The subject, to ensure comprehension, is asked to repeat the name for which he/she will be searching. The subject is handed the phone book and the timer is started. The timer is stopped when the subject finds the number and says it aloud. There is a time limit of 3 minutes.

Instrumentation

- Phone book (included in the Timed IADL Kit);
- Digital stopwatch.

Multiple copies of an identical, real phone book (Birmingham, AL 1996 - '97) have been provided to each of the ACTIVE Field Sites. Multiple copies will be provided since the phone book will need to be replaced periodically because of the wear and tear associated with heavy use in testing.

Procedure

To eliminate any memory effects and reduce wear and tear on specific pages of the phone book, the subject will be asked to lookup different names during different assessments. All the names are from the middle portion of the phone book, contain a middle initial, and are not found at the beginning of a page, column, or surname listing.

Watch subject do the task. If s/he asks what the name was, give the target name again, spelling it out if necessary. If the subject has questions relating to alphabetical order, do not give help, just restate the target name. (Allowable prompts: target name only).

Task B Making change

Description of task

The subject is told to count out 67 cents in change and place it on the table. The subject is then handed a handful of change (3 quarters, 4 dimes, 3 nickels, & 4 pennies), and the stopwatch is started. Be sure the stopwatch is reset to zero. Putting the change in the person's hand reduces the contribution of motor deficits the subject might have in picking up coins off of a flat surface. The subject picks out the change and places it on the table. The timer is stopped when the subject has selected the change. There is a time limit of 2 minutes on this task.

Instrumentation

- Coins (3 quarters, 4 dimes, 3 nickels, 4 pennies)
- Digital stopwatch

NOTES AND CAUTIONS:

- The coins should be placed in the non-dominant hand so they can be picked out with the dominant hand.
- **Motor problems/deficits:** If the subject is unable to hold the coins in one hand and select the appropriate coins with the other, spread the coins on the table and cover them with your hand. Ask the person to count out 67 cents by moving 67 cents to a different location on the table. Start the timer when you uncover the coins.
- Watch the person doing the task. If the person asks what the target amount is, tell them "67 cents" again. Do not give feedback about their accuracy during the task or indicate to the subject how much they have already counted out. (Allowable prompts: target amount only).

Task C Reading Can Ingredients

Description of task

The subject is instructed to find and read aloud the ingredients on three cans of food. This is a real-life visual search task that provides important nutritional information. The subject is handed one can at a time. The stopwatch is started when the subject is handed the can. The stopwatch is stopped after the subject reads the third ingredient listed. There is a time limit of two minutes on this task. This task is a modified version of a three-can task used previously in a gerontological study at the University of Alabama at Birmingham.

Instrumentation

- Digital stopwatch
- An identical set of three different cans, labeled '1', '2', and '3' has been provided to all sites. Cans have been covered with clear tape to avoid wear and tear with continued use.

NOTES AND CAUTIONS:

- Start the stopwatch when you hand the can of food to the subject. Hand the can to the person with the front label facing him/her. (The arrow on top of the can should point toward the subject).
- The only prompt to be given to the subject in response to any question is: "I want you to read the ingredients. It will say the word 'ingredients' on there." This prompt should only be given in response to a question.
- It is common for the subject to read the nutritional information (protein, fat, etc.). If the subject reads the nutrition information and continues, without asking any questions, to read the list of ingredients, simply let the timer go until the third ingredient is read. If the subject asks you something like, "Is that what you want me to read, the response is: "I want you to read the list of ingredients."
- Stop the timer when the subject reads the third ingredient. Record the elapsed time, and check the appropriate accuracy category.

Task D Finding Items on a Shelf

Description of task

This is a timed visual search task using real targets and distractors to simulate locating items on a supermarket shelf. The subject is given two food items to locate in a standardized array of food products. The location of the targets and distractors will be standardized by providing identical kits to each testing site. The shelf containing the food items is placed on a table within arm's reach of a seated subject. The subject is told what two items s/he has to find. After establishing that the subject understands what items s/he is looking for, the array is uncovered and the timer is started. The stopwatch is stopped when the subject has touched the two target items. There is a time limit of 2 minutes on these tasks.

Instrumentation

- Digital stopwatch
- Kit with arrangement of food items

Procedure

Move the closed Timed IADL Kit with the food array to a location on a table within easy reach of the subject. Place the box directly in front of the subject. The shelf should be at eye level. Placing the array on a table with the subject sitting at the table is fine. Ensure that the array is not open such that the subject can view the contents prior to this task.

Task E Reading Directions on Medicine Containers

Description of Task

This task involves instructing the subject to read the directions on two medicine bottles. The ability to find instructions on a medicine container and read them correctly is an important one in the lives of most elderly people. Two real medicine containers are used (supplied in the Timed IADL Kit). The stopwatch is started after giving the subject the medicine container and is stopped when s/he finishes reading the directions. Timing for the two medicine containers is done separately. The time limit for each task is 2 minutes.

Instrumentation

- Digital stopwatch
- Two medicine containers labeled '#1', & '#2'. All sites will use identical medicine containers with identical labels. The labels have been covered with clear plastic to avoid the effects of wear and tear.

Section D. Digit Symbols Substitution Task

1. Description

The Digit Symbols Substitution Task is designed to measure how quickly a person can substitute a symbol for a number that is paired with the symbol. The task assesses visual-motor speed, visual search, and visual-motor coordination. The subject must copy each of the symbols that are paired with digits. Subjects are given precisely 90 seconds to complete as many substitutions as possible. The tester must time the task precisely using an electronic timer.

2. Materials \ Equipment Needed

- Digit Symbols Subject Data Forms #411a with ID label attached
- Individual Assessment Part II (2nd Annual Post-Test) Form #810 with ID label attached
- Electronic timer
- Pencils without erasers
- Digit Symbol Substitution Scoring Stencil
- Digit Symbols Coding Form #411

3. Administration

Testers must provide a smooth drawing surface for the task. Subjects should be given pencils without erasers. Give the subject the booklet titled: *Digit Symbol Substitution & Digit Symbol Copy Form #411a*. The complete script and administrative directives are provided in the Tester's Individual Assessment Part II (2nd Annual Post-Test) Form # 810. Follow the script for the task verbatim. Remember, this is a timed test, allow only 90 seconds. Precise timing is essential.

During the sample exercise, look to see if a *left-handed* subject blocks or partially blocks the key when filling in the marks. If this occurs, fold a separate record form in half, exposing only the digit symbols worksheet, and place it next to the subject's worksheet on the subject's right-hand side so that the extra key is aligned with the one blocked by the subject's hand. Have the subject use the separate key to complete the sample items and to take the actual test.

4. Coding

Coding should be completed after the testing session is complete. Use the *Digit Symbol Substitution & Digit Symbol Copy Coding Form #411*. For each item in the task, select the appropriate code for the following list:

CODE	DESCRIPTION	DEFINITION
1	Correct	The subject correctly copied the symbol.
2	Incorrect	The subject incorrectly copied the symbol.
3	Attempted/missing	The subject did not copy this symbol but copied other symbols that came after it.
4	Not attempted/missing	The subject did not copy this symbol or any symbols after it.

Section E. Digit Symbol Copy Trial

1. Description

The Digit Symbols Copy Trial assesses visual motor speed and provides a control against which to interpret the results of the Digit Symbol Substitution Task. The tester will time the trial allowing the subject as much time as required to copy all 93 symbols in the task. The subject must reproduce each of the symbols in the coding box beneath the printed symbol. No time limit is assigned. Allow the subject to complete all the symbols. The tester must time the trial precisely using a digital stopwatch.

2. Materials needed

- Individual Assessment Part II (2nd Annual Post-Test) Form #810 with ID label attached
- Digit Symbols Subject Data Forms Packet #411a with ID label attached
- Digital stopwatch (note this is different from the Digit Symbols Substitution Test for which an electronic timer was used.)
- Pencils without erasers
- Digit Symbols Coding Form #411

3. Administration

Testers must provide a smooth drawing surface for the trial. Subjects should be given pencils without erasers. The subject will use the same booklet distributed for the Digit Symbol Substitution Task: *Digit Symbol Substitution & Digit Symbol Copy Data Forms Packet #411a*. The complete script and administrative directives are provided in Form # 810. Follow the script for the task verbatim. Remember, you must time this task. The subject will be told to complete the entire task. Precise timing is essential. Be sure your digital stopwatch is re-set to zero before you begin the task; record the total time required to complete the task in G1 on Form # 810. The time it takes to perform the task should be recorded from the stopwatch in the following format: minutes: seconds: hundredths of seconds. For example, if the task takes two minutes thirty two and forty eight hundredths seconds, you would record 02:32:48. Monitor the subject closely throughout the test. The end time is when the subject completes the last symbol.

4. Scoring

Coding should be completed after the testing session is complete. Use the *Digit Symbol Substitution & Digit Symbol Copy Coding Form #411*. For each item in the test select the appropriate code for the following list:

CODE	DESCRIPTION	DEFINITION
1	Correct	The subject correctly copied the symbol.
2	Incorrect	The subject incorrectly copied the symbol.
3	Attempted/missing	The subject did not copy this symbol.

Section F. Blood Pressure, Pulse, Height, and Weight

F1 - F5. Blood Pressure and Pulse

1. Description

The first physical measurements are the measurements of blood pressure and pulse determined using the Omron Automatic Digital Monitor. For this study, blood pressure and pulse are considered indicators of health status. Before the first blood pressure and pulse rate are obtained, the subject must be sitting for 5 minutes. The **left** arm should be used consistently for both measurements.

2. Materials/Equipment needed:

- Omron Automatic Digital Blood Pressure and Pulse Monitor, Model # HEM - 737
- Two blood pressure cuffs: adult and large adult sizes
- Clock for timing the rest periods

3. Measurement

a. Preparation:

1. The blood pressure and pulse should be measured in a quiet location where there is minimal movement and no loud talking.
2. The Subject should sit quietly in a relaxed position for 5 minutes prior to the first measurement. If the subject gets out of the chair before 5 minutes have passed, start over when she/he sits down again. It helps to let subjects know this so they can cooperate.
3. If the subject cannot sit as prescribed, measure BP in whatever position they are most comfortable and record the position next to the reading in the margin of the form (e.g. lying, standing).
4. Explain to the subject that, as a matter of routine, her/his pressure and pulse will be checked twice. Ask that they keep their legs uncrossed and their feet flat on the floor while their pressure and pulse are being measured.

5. Position the digital display facing the tester so the readout cannot be viewed by the subject.

b. Measurement:

1. Ask the subject to refrain from talking during the rest periods and during the readings. Do not direct questions to the subject during the measurements or during the rest periods.
2. The measurements should always be taken on the subject's **left** arm so ask the subject to bare their **left** arm. If a rolled up sleeve is very tight, the subject will need to change shirts. This should be noted at the beginning of the interview before everyone has been seated. On occasion, one arm can be slipped out of the sleeve back towards the body and then brought back out bare without having to remove the shirt. Make sure the subject is not chilly. In certain instances a blood pressure measurement on the left arm may be impossible or medically contraindicated. Examples include a renal shunt for kidney dialysis; left arm amputation; pain on cuff inflation secondary to left breast mastectomy; or muscular or skeletal disease. A subject may refuse to allow blood pressure measurement on the left arm for other reasons. As necessary, complete the blood pressure and pulse measurements on the right arm. Always document the arm used for the measurements on the data form.
3. The arm used for the measurements should be supported at heart level on a surface such as a desk or table. The arm should be slightly flexed with the palm facing upward.
4. The cuff should be assembled correctly when it is removed from the box. If it is not, pass the end of the cuff furthest from the tubing through the metal D-ring to form a loop. The smooth cloth should be on the inside of the cuff loop. When the cuff is assembled correctly, the sewn hook material will be on the inside of the cuff loop and the metal D-ring will not touch the subject's skin.
5. Choose the correct cuff size. This should be done before the first measurement and the same size cuff must be used to obtain both measurements. To get an accurate reading, the cuff chosen must fit the person properly. If it is too narrow, the reading may be falsely high. If it is too wide, the reading may be falsely low. Cuff size indicates the width of the cuff's bladder, not the length of the cuff. The standard cuff will fit the average adult arm.
 - Locate the subject's brachial artery by pressing two fingers approximately one inch above the antecubital fossa (elbow crease) on the inside of the left arm. Determine where the pulse is strongest.
 - Put the subject's arm through the cuff loop making sure that the bottom edge of the cuff is approximately one-half inch above the antecubital fossa. A green border appears on the lower border of the cuff. Make certain the green area of the cuff is directly above the brachial artery.
 - Pull the end of the cuff so that the top and bottom edges of the cuff are evenly tightened around the subject's arm. When the cuff is positioned correctly, press the Velcro together firmly. Make sure the cuff fits snugly around the subject's arm; it should make good contact with the subject's skin. Make sure that the subject's skin will not be pinched in the D-ring when you inflate the cuff bladder. **(If the skin becomes pinched during inflation, immediately deflate the cuff bladder and readjust the cuff. If this happens, wait 2 minutes before re-inflating the cuff.)**
 - Insert the air plug of the arm cuff selected into the air jack of the monitor. Make sure that there are no kinks in the air tubing.

6. Press the ON/OFF button on the monitor. Remind the subject to remain still during the measurements. All display symbols appear for approximately one second, this is the initial LCD test.
7. After the monitor completes the necessary preparations before measurement, the “Ready to Measure” symbol (♥) will appear next to the zero on the digital panel.
8. Press the START button. As the cuff inflates, the monitor automatically determines the subject’s ideal inflation level. During this process the ‘INTELLISENSE’ symbol will be flashing on the display. Remind the subject to remain still throughout the measurement.
9. When the measurement is complete, a heart symbol flashes again and the arm cuff will automatically deflate. The monitor will alternately display the subject’s blood pressure and pulse on the digital display panel.
10. Record the first blood pressure and pulse readings on the ACTIVE data form exactly as they appear on the monitor’s digital display. Record the systolic and diastolic blood pressure and the 60 second pulse rate. Recheck your recordings on the data form against the readings on the monitor prior to turning OFF the monitor. Any and all abnormalities or emergencies must be noted on the data form.
11. Press the ON/OFF button to turn off the monitor.
12. Instruct the subject to wait 2 minutes prior to the second reading. Use a clock to time the rest period accurately. The cuff may stay in place on the subject’s arm during the rest period. Be certain the cuff is in proper position prior to the second reading.
13. Repeat the procedure and record the second blood pressure and pulse readings on the data form. Recheck your recordings on the data form against the readings on the monitor prior to turning off the monitor.

c. Error Messages:

1. In some instances, a subject’s physiological characteristics may require a higher level of inflation than the monitor accommodates on the first inflation attempt. These circumstances may include a weak pulse or an elevated systolic blood pressure. When this occurs, the monitor may re-inflate to a level of about 30 mm Hg higher than the first inflation level (but never higher than 275 mm Hg). Automatic reinflation will occur only once. You should record the values from these readings on the data form. You must also document that a second automatic inflation was required to obtain the reading.

If the monitor is unable to obtain a systolic blood pressure at the second automatic inflation, do not attempt to obtain another reading. Note this in the margin of the form. Strongly encourage the subject to have their blood pressure checked by a health care provider as soon as possible as the systolic pressure may be higher than 240 mmHg.

2. If you want to stop the measurement for any reason, push the ON/OFF button. The monitor will stop inflating and start deflating rapidly, then the monitor will power off.

F6. Height

1. Description

Height will be measured and used with weight to calculate the subject's body mass index (BMI), a general indicator of health status.

2. Materials Needed:

- Right angle Handi-Stat wood piece
- 8 foot wood folding carpenter's ruler
- Luekopor medical paper tape

3. Measurement

a. Preparation:

- Explain the procedure to the subject.
- Floor should be a hard, even, flat, un-carpeted surface.
- Measurement location may be inside a doorway, against a closed door, or in a hallway.
- Areas with a baseboard, threshold, or other protrusion should not be used.
- Ask the subject to remove shoes.
- Ask the subject to stand with feet flat on the floor, heels together, with heels, hips, shoulders and head directly against the wall.
- Ask the subject to tilt head forward, so that you can place a strip of medical paper tape on the wall in a vertical position over the approximate area where height will be marked. (To avoid marking or tearing the wall during removal, do not press tape tightly to the wall.)
- Once the tape is in place, ask the subject to stand up straight and look straight ahead with head against the wall.

b. Measurement:

- Rest the wooden base of the Handi-Stat against the wall above the subject's head with the right angle toward the floor.
- Slide it slowly down until it touches the top of the subject's scalp, carefully centered with subject's nose. Make sure the wooden edge is flat and held steadily against the wall.
- Using a pencil, mark the tape on the wall exactly where the corner of the right angle touches the tape. Be sure to mark the tape from underneath the wood, pencil angled upward.
- Remove the Handi-Stat and ask the subject to step away from the wall.
- Carefully open the folding ruler and make sure it is straight.
- Secure the ruler against the wall by pressing it with your foot at the '0' end.
- Keeping the ruler flat against the wall, read the measurement closest to the mark on the tape and record to the nearest half inch; round up.
- Use a straight chair or stool to read the measurement if the subject is taller than you.
- Record the measurement on the data form and carefully remove the tape from the wall/door.

c. Exceptions:

If for any reason (kyphosis, wheelchair-bound, unsteady without a cane, etc.), the subject cannot complete the measurement according to the protocol, do not record a measure in F6; rather, record “missing” in the margin next to the F6 data fields and complete F6a and F6b. F6a allows you to code the reason why the measure was not completed; F6b requests the subject’s self-reported height.

4. Coding

Height should be recorded in inches to the nearest half inch, rounded up to the nearest half inch.

F7. Weight

1. Description

Weight will be measured and used with height to calculate the subject’s body mass index (BMI), a general indicator of health status.

2. Materials needed

- Large digital display scale with extra wide base
- Metal disc standard weights for Q.C. calibration
- Germicidal handi-wipes
- Paper towel

3. Measurement

a. Preparation:

- The scale should be placed on a level floor surface. Avoid carpets or rugs of any kind.
- The subject removes shoes, belt, sweaters and outerwear prior to measurement; all pockets should be empty of heavy objects.
- The tester should check that the scale is programmed to the pound mode and that it balances at zero before each measure.

b. Measurement:

- Body weight is obtained with the subject standing motionless in the center of the scale looking straight ahead with arms relaxed and hanging loosely at the sides.
- Note the digital readout and record to the nearest .5 lb. on the form.

c. Coding

- Record weight in pounds to the nearest .5 lb in F7.
- Record the ID# of the scale used in F7c.

4. Exceptions

If for any reason the subject cannot complete the measurement according to the protocol, do not record a measure in F7; rather, record “missing” in the margin next to the F7 data fields and complete F7a and F7b. F7a allows you to code the reason why the measure was not completed; F7b requests the subject’s self-reported weight.

7. **Section G. Grip Strength (Jamar Dynamometer)**

1. Description

Grip strength is a measure of hand strength that influences performance of ADLs.

2. Materials needed

- Hydraulic hand dynamometer
- Paper towel

3. Measurement

a. Preparation:

- The grip strength measure should not be completed on subjects who report recent worsening of pain or arthritis in their wrists or recent tendonitis. Also skip this measure on subjects who report surgery on their hands or wrists in the last 3 months. “Yes” responses to questions G1 and G2 will rule out these subjects. Follow the skip pattern and move to Section H when you complete the coding for G1 and or G2.

b. Measurement:

- The grip strength measure will be completed on the dominant hand only. For the ACTIVE study the dominant hand is defined as the hand the subject uses to write his/her name (G3). Complete the measure on the subject’s dominant hand as reported in G3.
- Seat subject in a chair, legs uncrossed with back supported and arm at his/her side in 90 degrees of elbow flexion, forearm and wrist in neutral alignment. The arm cannot be supported or resting on an object.
- The dynamometer is placed in the palm of the subject’s dominant hand with the global gauge facing outward. The handle grip size is adjusted so that the middle section of the middle finger is flexed to 90 degrees. Record the hand width setting on the data form.
- Tester should be seated in front of subject. One hand stabilizes dynamometer in vertical position with gauge readings obscured from the subject’s view.
- Demonstrate the measure for the subject.
- Now have the subject grasp the dynamometer handle.

- Subject should be instructed to squeeze as hard as possible when instructed to do so and hold the contraction until told to relax.
- Cue the subject to begin with “OK squeeze now.” When they begin to squeeze, coach them by saying, “squeeze, squeeze, squeeze, relax.”
- Subject is instructed to perform 2 test trials on their dominant hand with the same cueing as above.
- Allow one minute of rest between the first and second trials.

4. Coding

- Record the dynamometer hand width setting in G4. Record #1 for the smallest grip setting (i.e., bars are closest together) to #5 for the largest grip.
- The force reading is recorded in kilograms (outside scale on the gauge) from the dynamometer on the data collection form for each test trial in G5, 1st try, and G6, 2nd try. Round up to the nearest whole Kg. Gauge reading is in increments of 2Kg. If reading is in the middle of 2 lines, record the interim odd Kg. The dynamometer is reset to zero after each trial.

Section H. Turn-360 Test

1. Description

The Turn-360 Test is a dynamic measure of balance that is related to falls and influences performance of ADLs.

2. Measurement

Position subject with feet slightly apart (about as far apart as shoulders). Demonstrate the starting position. Following the script, you will ask the subject to make a complete turn in place as quickly and safely as s/he can. Do not demonstrate the turn.

Stand close to the subject in case the subject begins to lose his/her balance, but be certain you have a clear view to allow an accurate count of steps. Subjects are not allowed to remove their shoes; subject MAY use an assistive device -- cane, walker -- if s/he cannot perform the test safely without it.

The turn should be repeated. If the subject is dizzy or unstable after the first turn, allow subject to sit down. If the test cannot be completed safely, record on form and proceed to Section I.

3. Coding

Record the number of steps taken to return to the start position for each of the two turns in H1 and H4. Each lifting and lowering of the foot counts as a step. The most dramatic turn -- the pirouette -- counts as one step, as one foot must be lifted and lowered to pivot the body on the other foot.

Record the use of an assistive device.

4. Responses to Possible Questions

Subject: “I don’t understand what I’m supposed to do. What do you mean, ‘turn’?”

Tester: “What we’re interested in here is how you can turn around. (Demonstrate by making a circle with your finger). In other words, beginning with your current position, how quickly but safely can you turn completely around, or 360 degrees.”

Subject: “I still don’t understand. Can’t you demonstrate?”

Tester: “No, I can’t demonstrate. If I show you how I would do this task, it might influence how you do the test. What is not clear to you? I can try to explain how it is done once more.”

Subject: “I don’t feel safe. I don’t want to do this. I’m afraid.”

Tester: “We only want you to try this test if you can do so quickly and safely. You are allowed to use a cane or walker, if you have one. [ASCERTAIN IF THIS WILL SOLVE THE PROBLEM. IF NOT:] If you do not feel safe, I do not want you to try this test.”

Now Complete the OTDL

Complete the OTDL after the Break Point and before the Mobility Questionnaire. Use the OTDL Data Form # 422, the OTDL Administration Kit and the Question by Question Specification Guide for Administration of the OTDL.

Section J – M. Mobility Questionnaire

Introduction:

The Mobility Questionnaire is a questionnaire designed to assess the extent of the subject's usual mobility and driving habits. Specifically, the questionnaire assesses:

- a) the range of a person's **life space**
- b) the extent to which they have trouble with **falls**
- c) a person's **driving** habits

The instrument is particularly suited for assessment of these mobility-related behaviors in older individuals. Functional independence and mobility are critical elements of an older person's quality of life and therefore represent important outcome measures.

The questionnaire is divided into four sections:

1. Section J. Life Space
2. Section K. Falls
3. Section L. Driving Habits of Current Drivers
4. Section M. Non-Drivers

Section J. Mobility Questionnaire/Life Space

Introduction

This section assesses the range of the life space. It starts with a question on household composition. We are basically interested in finding out how much the person gets out and about and the spatial extent of the person's typical life space, i.e., what is the usual range of places in which the person engages in activities. We are interested in the places the person has been recently. The questionnaire asks nine questions about where a person travels to in a particular period of time. The nine questions are sequenced in a hierarchical fashion to reflect an expanding life space, ranging from being confined to one's bedroom and moving successively to the exterior of the home, to the immediate home surroundings, to the immediate neighborhood, to the community, beyond one's community, beyond one's city or county, out of state, and finally beyond one's region of the country. If the subject's life space extends beyond the immediate surroundings of his/her home, the questionnaire assesses whether the subject personally drives to these destinations. These supplementary questions on driving assess the subject's autonomy in functional mobility in their life space.

- The time period for the question will change from seven days (Questions 2- 7) to two months (Questions 8 - 10), so be sure to be clear about the time frame you are referring to. For more distant places, the time frame is two months, and for all other places, the time frame is the last seven days, excluding the day of the assessment.
- Since we are interested in their usual behavior, we do not want to include any travel necessary to participate in the present appointment since this assessment appointment may be out of the ordinary for some people. Therefore one must stress that the questions do not pertain to travel on the day of the assessment.
- It is recommended that you mention the specific time frame you are asking about (e.g., if the questionnaire is being administered on a Thursday one would say, "between last Wednesday and yesterday have you been"). The provision of a more concrete time frame should help the subject in remembering their various destinations.
- For the primary component of Questions 5 to 10, it is not important how the subject got to these destinations, i.e., they might have been driven by another person, wheeled in a wheelchair, taken a taxi cab, or used public transportation. However, for the secondary component of these questions which asks did they "personally drive there" themselves, the subject must have driven, i.e., operated the vehicle, in order to respond with a "Yes".

J1: This question collects information about how many persons live with the subject and the relationship of these persons to the subject. If the subject reports living alone, code (1) and skip to J2. If the subject reports living with others, ask J1a and J1b. When you ask how many people live with the subject, s/he will often give you the answer to J1b without you having to ask the question. You can use the questions for J1b as probes if the subject does not offer the information. Record the number reported for each category. Record 0 if none (e.g. children) are mentioned. If the number/s reported for J1b do not equal the number in J1a, probe to correct the inconsistency.

J2: This question asks about going to places outside the room where they usually sleep. This includes other rooms of the home such as the bathroom, kitchen, den, living room, etc. A person would only answer "No" to this question if they had been bed-bound for the last 7 days.

J3: This includes going to, or through, places immediately outside the home area but still adjacent to the home. These places include a porch, deck, patio, garage, or hallway of an apartment building. The places covered by this question don't have to be destinations. For example, a person going to their mailbox or down the block would obviously pass through one, or more, of these places and should answer "Yes".

J4: This includes going to, or through, places outside the home area and into places immediately surrounding the home such as the yard, driveway, sidewalk, courtyard, or parking lot. As in the previous question, a person going through these places on their way to a more distant destination should answer "Yes" to this question.

J5: This includes going to, or through, places beyond the property where their home is located. For homeowners, this refers to places beyond the property line. For those living in city apartments, this refers to places beyond the immediate block. For rural areas, this includes leaving the property lines. This part of the question refers to places they have been regardless of the mode of travel (walking, car, etc.), even if someone else drove.

J5a – J10a: The subject must have actually physically driven the vehicle him/herself. Being a passenger in a car, taxi, or using public transportation doesn't qualify for a "Yes" answer. If subject reports that s/he walked, the answer is "No".

J6: This includes going to, or through, places outside the neighborhood surrounding the home. In a city, this would be places beyond the surrounding 5 blocks. In a suburban area this refers to places about 3 streets from the home. For sparsely populated rural areas, this includes going to places on the other side of the closest neighbors. The first part of the question refers to places they have been regardless of the mode of travel (walking, car, etc.), even if someone else drove.

J7: This includes going to, or through, places outside the town or community area nearest the home. This refers to places outside a particular sub-region of the city. This could be areas with a distinct name, or city areas such as east, west, north, or south. For rural areas, this includes going to places on the other side of the nearest town. This part of the question refers to places they have been regardless of the mode of travel (walking, car, train, subway, etc.), even if someone else drove.

For Questions J8 – J10, note the change in the reference time frame. The specific time frame must always be given to the subject to improve their recall (e.g., if the questionnaire is administered on June 16th, the administrator would say, "Today is June 16th, so we are asking about the period of time from April 16th up to, and including, yesterday")

J8: This question refers to the past 2 months but not today. This includes going to, or through, places on the other side of the county line (where substantial travel is involved) or to places on the other side of a large city. Subjects living near a county line where crossing into another county does not constitute a significant distance should not respond "Yes" here. In rural areas one could use a 20 mile radius as a guideline to answering questions of clarification on J7.

J8a: The subject must have actually, physically driven the vehicle outside the county or city. Being a passenger in a car, taxi, or using public transportation doesn't qualify for a "yes" answer.

J9: This question refers to the past 2 months but not today. This includes going to, or through, places over the state line. Subjects living close (less than 20 miles) to the state line should not

answer "Yes" to this question unless they traveled a substantial distance (more than 20 miles) into a neighboring state. This part of the question refers to places they have been regardless of the mode of travel (car, train, airplane, etc.), even if someone else drove.

J9a: Flying to another state and then driving does not justify a "Yes" response for this question. The person must have actually driven to another state.

J10: The region of the country should be specified site-specifically and the appropriate states listed as in the following list. "By this region, we mean the states of _____"

ACTIVE FIELD SITE	STATES
Site	Alabama, Florida, Georgia, Louisiana, Mississippi, or Tennessee
Site	Maryland, New Jersey, New York, Ohio, Pennsylvania, or West Virginia.
Site	Delaware, Maryland, New Jersey, Pennsylvania, Virginia, or West Virginia.
Site	Indiana, Michigan, Ohio, or Ontario (Canada)
Site	Illinois, Indiana, Kentucky, Michigan, or Ohio
Site	Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, or Vermont.

The first part of the question refers to places they have been regardless of the mode of travel (car, train, airplane, etc.), even if someone else drove.

J10a: The subject must have actually, physically driven the vehicle outside their region of the US. Examples include:

- 1) Riding in the car while the spouse drove. Code this as NO
- 2) Driving for 1 hour while the spouse rested or slept. Code this as NO
- 3) Flying somewhere and then driving a short distance. Code this as NO
- 4) Driving more than half the trip out of the region. Code this as YES.

Section K. Mobility Questionnaire/ Falls

Introduction

This section is adopted from the NIA-funded Salisbury Eye Evaluation (SEE) study (a population based study on vision impairment and functional disability in older adults). In the SEE study, the time frame was 12 months; for the repeated testing in the ACTIVE project, the time frame was shortened to 'the last 2 months'. This change will serve to reduce memory demands.

The questions in the section will ask the subjects about falls in the last 2 months. If the subject reports falling in the last 2 months, the frequency and contributing factors are explored for the most recent fall. Falling is associated with functional (including cognitive) impairment, morbidity, and mortality. It is a highly relevant adverse outcome, as evidenced by the voluminous literature addressing falling in the elderly.

The subject is asked whether they had a fall in the past 2 months. In the literature, falling is broadly defined as "unintentionally coming to rest on the ground or at some other level such as a chair".

Since this might be a little too abstract for the subjects, an effort is made to try and convey the idea in more concrete terms. It is important, therefore, to convey a broad definition of falling. Such a definition includes:

- 1) losing balance and falling on the ground, or falling against something such as furniture in the home or elsewhere.
- 2) missing a step, tripping over something, stumbling off the curb and falling, slipping on wet grass, pavement, ice or snow and falling etc.

If the subject reports a fall in the last two months, then s/he should be asked to answer the follow-up questions on the frequency, severity of the falls, and the circumstances surrounding their most recent fall.

K1: The specific time frame must always be given to the subject to improve their recall, e.g., if the questionnaire is administered on June 16th, the administrator would say, "Today is June 16th, so we are asking about the period of time from April 16th up to, and including, yesterday."

K2: Have the person make the best guess they can. If they have no idea, try to get them to estimate by asking if it was more than 1, more than 3, more than 5?, more than 10? etc.

K3: This question is aimed at assessing the severity of the fall.

- 1) Injury: Ranges from bruises, soreness, to muscle, ligament, or bone damage resulting from the fall.
- 2) Medical attention: Refers to attention for a fall injury from a nurse, paramedic, doctor, or other medical personnel.
- 3) Hospitalization: This includes a visit to a hospital emergency room or clinic, or stay in a hospital or clinic for injuries caused by the fall.
- 4) Loss of consciousness: This includes fainting or blacking out at the time of, or after, the fall. Even if this is for a brief period of time, the subject should answer "Yes" to this question.

Questions 4, 5, and 6: all refer to the most recent fall in the previous 2-month period. By focusing on the most recent fall, it is hoped that details of the fall will be remembered more accurately. The questions attempt to identify whether external, environmental, or internal factors, or both, contributed to the most recent fall.

K4: This question refers to the most recent fall. If there were 5 falls in the past 2 months, you are interested in the last one that happened. The question is trying to see if any external, environmental factors contributed to the fall. For example, did the subject slip on something, did s/he trip over something? Did something such as a rug, stairs, a curb, or ice contribute to this most recent fall?

Subjects should answer "Yes" to this question if they can identify some external factor or circumstance which contributed to their falling. A subject should answer "No" to this question if there was nothing in the environment which contributed to their falling, i.e., they fell because of some internal factor such as a medical condition, dizziness, musculoskeletal weakness etc. Clarify any questions the subjects might have.

K5: This question is attempting to find out whether there were other factors besides external, environmental factors that contributed to the last fall. For example, did any physical or medical

condition of the respondent contribute to the fall (e.g. dizziness; orthostatic hypotension; inner ear problems; vertigo; motor or gait problems; vestibular problems; medication-induced confusion, etc.)

K6: Only ask this question of subjects giving a 'Yes' response to Question 5. The answer to this question should provide an explanation of the internal factors that contributed to the most recent fall. The person should write down any such factor in the space provided.

Section L. Mobility Questionnaire/Driving Habits of Drivers

For this section, the tester must first establish whether the subject is a current driver. We define a current driver as one who has driven in the last 12 months and who currently would drive a car if they needed to. Using this definition therefore, a current driver need not be a regular driver, but he/she could and would drive a car if needed.

Driving Habits for Current Drivers

This section assesses the subject's driving status and driving habits. Section L is completed by current drivers. It is modified from the interviewer-administered Driving Habits Questionnaire used extensively in previous studies on driving in older populations. Section L asks questions about typical driving habits, accident frequency, and perceived difficulty in eight challenging driving situations.

L1: This question is not asking about frequency or duration. They are referring to whether the person drives if s/he needs to go somewhere or whether they simply do not go if no one can drive them to their desired destination.

L3: This refers to the way the person **prefers** to get around, i.e., how they want to travel and how they like to travel, not the way they usually travel. Example: The subject may actually do all the driving, although they would **prefer** someone else drive them. Alternatively, a subject might usually be driven around but would actually prefer to do the driving him/herself.

L4: This does not refer to driving faster or slower than the speed limit. Subjects might say they drive at the speed limit. The question refers to the subject's driving speed in relation to the rest of the traffic on the road. For example, if a person always drives at the speed limit (say, 55 mph) but everyone else passes them because all the other cars are driving 70 mph. Such a person should respond with "Much slower" than the general flow of traffic.

L5: This is how the subject rates his/her own driving. This should be what the subject thinks about his/her own driving and not what his/her spouse or children say about his/her driving abilities.

L6: This is the average number of days per week out of 7 days that the subject gets into his/her car and personally drives the car somewhere. It does not matter how far s/he drives as long as the respondent actually operates the vehicle.

L7: Asks the subject to estimate the number of miles s/he drives in an average week. If s/he has no idea, prompt with "less than 25?"; "between 25 & 50" "More than 50?"; "more than 100?" etc.

Please note that the next series of questions ask about the subject's driving during the last two months.

The specific time frame must given to the subject to improve his/her recall; e.g., if the questionnaire is administered on June 16th, the administrator would say, "Today is June 16th, so we are asking about the period of time from April 16th up to, and including, yesterday."

L8: This question refers to driving when it is raining during the day or night. Rain includes any kind of rain (light shower to heavy rain). If the subject pulled his/her vehicle over during rain, s/he should still answer "Yes" to this question.

L8a: The subject is asked to rate the difficulty driving in an average rain shower (not limited to extreme cases of very heavy rain which would be difficult for everyone).

L8b: This question refers to avoiding driving in the rain by intentionally not going out until after the rain shower stopped. The subject should not categorize her/himself as an avoider if, by chance, s/he were never caught in the rain.

L9: This question refers to driving a vehicle with no other person in the car. Pets don't count.

L9a: The subject is asked to rate the difficulty of driving with no one else in the car.

L9b: This question refers to avoiding driving alone by insisting that someone ride with her/him when s/he drives, or forgoing a trip because no one is available to ride with her/him.

L10: This refers to waiting for the traffic to clear and making a left turn across lanes of oncoming traffic. This question is not asking about whether the subject pulled out into oncoming traffic. The 'left turn' does not refer to turns made with a green left-turn arrow at a traffic light (i.e., a protected left turn). This turn can occur at a median, from a center turn lane, at a green light (unprotected by a left-turn arrow) etc.

L10a: The subject is asked to rate the difficulty of making left turns across traffic. This refers to waiting for the traffic to clear, judging the distance of other cars, and determining the distance needed to make a safe turn.

L10b: This question refers to actively avoiding these turns by going out of the way to catch a traffic light with a green arrow, or making several right turns around the block to get to the desired street. A subject might respond "No" if s/he never had an occasion to make such a turn, or all such turns were protected by left-turn traffic control devices.

L11: This refers specifically to entering the highway or expressway from an entrance ramp. Some traffic should be present to justify a "Yes" response.

L11b: This question refers to avoiding the highway or expressway altogether and driving an alternate route to get to their destination.

L12: This refers to driving on roads with a lot of traffic such as 2 or 3 lane roads or a main road in your area that might be congested with a lot of traffic. This does not include the highway or expressway.

L12a: The subject is asked to rate the difficulty of driving on high-traffic roads.

L12b: This question refers to avoiding high traffic roads by planning an alternative route where there is less traffic on the road.

L13: This question refers to driving during normal rush-hour traffic (which will vary for each location). This time is usually during the morning from 7 to 9 am and in the afternoon from 4 to 6 p.m.

L13a: The subject is asked to rate the difficulty of driving on during rush hour.

L13b: This question refers to avoiding rush-hour traffic by scheduling driving to occur before or after rush-hour traffic hours.

L14: This is driving during the nighttime hours (after the sun went down).

L14a: The subject is asked to rate the difficulty of driving at night. This includes difficulty with bright headlights from other cars, seeing glare from streetlights, having difficulty reading street signs, etc.

L14b: This question refers to avoiding night driving by scheduling activities so that the person does not have to drive a car when it is dark.

L15: This question refers to making lane changes to pass another vehicle, or switching lanes in traffic to get to a turn lane. The question covers lane changes on any type of two-lane road, highway, or expressway. Changing lanes in the absence of any traffic to get to a turn lane or turning onto an exit ramp do not justify a "Yes" response for this question. The idea is that the lane change was made in the presence of surrounding traffic which had to be noticed in order for the maneuver to be completed safely.

L15a: The subject is asked to rate the difficulty making these lane changes in the presence of traffic.

L15b: The question refers to avoiding lane changes to pass a slower vehicle and preferring to stay in the same lane while on the road.

L16, 17 and 18: Please note that the remaining three questions ask about events since the last visit, approximately 14 months ago, rather than over the last two months. The last visit date should be taken from the subjects VCS and provided to the subject to assist in the completion of these questions

The specific time frame must be given to the subject to improve his/her recall; **e.g.**, if the questionnaire is administered on June 16th, the administrator would say, "The remaining questions ask about things that might have happened since your last visit on (DATE)". Since today is June 16th, 2000, the following questions are asking about the period of time from April 16th, 1999 (approximately 14 months ago) until yesterday."

L16: This question refers to a serious suggestion coming from anyone (spouse, children, doctor, friend, etc.)

L17: This includes all fender benders, minor or major accidents even if it was the other driver who caused the accident. Example: A subject would answer "Yes" if that person was sitting at a light and someone else hit them from behind. The subject must have been the driver, not a passenger.

L18: This does not include being stopped at routine driver's license checkpoints. This refers to being stopped for speeding, or some other violation.

L18a: Refers to receiving a ticket (speeding etc.)

Section M. Mobility Questionnaire/ Driving Habits of Non-Drivers

This section assesses the driving status for non-drivers, including their reasons for stopping driving, and vehicular accident history. This section is completed for subjects who meet the ACTIVE definition of current non-drivers. The section has been modified from the Driving Habits Questionnaire used extensively in previous studies on driving in older populations.

M2: This refers to the way the subject **prefers** to get around, i.e., how s/he wants to travel and how s/he likes to travel, not the way s/he usually travels. Example: The subject may actually do all the driving, although s/he would **prefer** someone else drive her/him. Alternatively, someone might usually be driven around but would actually prefer to do the driving her/himself.

M3: There may be subjects who never drove. These people would respond "No" and would be finished with the Mobility Questionnaire. If the respondent once held a driver's license or drove at some stage of their lives, then s/he should answer "Yes" on the question and proceed to the remaining questions.

M5: The subject should estimate the number of years and/or months since s/he last drove a car. You can prompt the subject by saying, "was it in the past month?; the past 6 months?; within the past year? within the past 2 years?"

M6: The suggestion coming from anyone (spouse, children, doctor, friend, etc.) to stop or limit the subjects driving since s/he's last visit.

M6a: Try to pinpoint who suggested that they curtail their driving.

Refer to the information received for Question 5. If the subject stopped driving within the last two years, proceed with the rest of the questions. If the subject stopped before that, then the questionnaire is complete.

M7: The subject should estimate the number of driving accidents s/he was involved in since her/his last visit. This includes all fender benders, minor or major accidents even if it was the other driver who caused the accident. Example: A person would answer "Yes" if that person was waiting at a light and someone else hit them from behind. The subject must have been the driver, not a passenger.

M7a: This should estimate the number of times the subject was pulled over by the police since her/his last visit. This includes all accidents where the police came, even if it was the other driver who caused the accident. The subject must have been the driver, not a passenger.

M8: This does not include being stopped at routine driver's license checkpoints. This refers to being stopped for speeding, or some other violation.

M8a: Refers to receiving a ticket (speeding etc.)

Section N. Health Questions

The purpose of N1 (a-k) is to obtain a listing of chronic diseases. The question, “Has a doctor/nurse ever told you that you have:” is specifically worded so that the subject does not make up diagnoses. For example, the subject may have some difficulty seeing and think s/he has cataracts, but if they have not been told this by a doctor (or Physician’s Assistant) or nurse (RN, Nurse Practitioner), it should not be listed as such. In some sites, subjects might regularly see a physician’s assistant for primary care. If a subject reports that a physician’s assistant or nurse practitioner told them they have the condition, code the condition YES. The time-frame for these questions assume an approximate 14 month interval prior to the interview.

N2 – N2e will allow us to classify subjects as never, former, and current cigarette smokers and obtain a quantity of exposure.

N3 and N3a are about alcohol exposure and may be sensitive questions. If there is a hesitation, it would be appropriate to reassure the subject again that all information will be kept in strictest confidence.

N4, N4a and N5 are asking about pain and conditions that have occurred since the subject’s last visit. Before starting these questions, the tester should obtain the **date of the last visit** and provide it to the subject.

N4a is trying to determine if the subject has limitations in activity due to joint or body pain. If the subject answers yes to a specific location, ask again if the pain in that location limits their activity.

N5 is being asked because, among older persons, pneumonia increases risk of mortality and frailty.

N6 – N8a ask about the type of insurance the subject has. Insurance type may affect how easy it is for subjects to get care. For question N6b, obtain a list of local HMO programs. Have this list ready to read to the subject when asking the question.

Section O. Health Services Utilization

1. Description

The use of health services is an outcome of major interest. The purpose of the questions in this section is to determine the type, amount, and reasons for use since the subject’s last study visit. In addition, there are four questions at the end of this section inquiring about the subjects’ and their spouses’ employment histories.

2. Administration

O1-4: Inquire about the subject’s usual source of care, referring to the site of this care and the medical specialty of the physician whom the subject sees regularly. If the subject reports receiving care from multiple doctors, ask them for the specialty of the doctor they see most frequently, or see for routine care or minor problems. If subject states that the physician is both an internist and cardiologist, or internist and geriatrician, code the narrower specialty, i.e., cardiologist or geriatrician. NOTE: These questions refer to care received since the subject’s last visit date.

O5: Record the number of times the subject has had a physician visit or talked to a physician on the phone since the subject's last visit, provide subject the date of her/his last study visit. This number includes contact with any physician, not limited to the physician noted in Q3-4.

O7: This question inquires about the reason(s) for the most recent contact (visit or telephone) with a physician (i.e., the contact noted in O6). Do not read the responses. Code based on subject's response.

O8: These questions ask about use of dental services since the subject's last visit, including number of visits.

O10-13: These questions ask about use of hospital care since the last visit. These questions refer to overnight hospital stays, not outpatient services such as day surgery. If none, skip to O14.

O12: Record the total number of nights in the hospital, i.e., for all hospitalizations since the subject's last visit.

O14-16: These questions ask about use of nursing home services. If none, skip to O17. The questions are similar to those for hospital stays.

O17: Record the number of times since the last study visit that the subject has received treatment in an emergency room. This includes both urgent care (e.g., for an injury, chest pain) or routine care when subject did not have access to a physician.

O18: This question asks about the frequency of use of several types of health or supportive services. Again, the time reference is since the last study visit.

O19: This question asks subjects if they ever worked.

O20: This question asks if their spouse ever worked. (Probe provided, "What occupation does your spouse consider him or herself?") If never married, code Not Applicable. If married multiple times, record spouse's work or occupation for the longest marriage as stated by subject.

Instructions for the Take Home Instrument.

At the end of the session read the closing script to the subject. The closing script that includes instructions for the Take-Home Questionnaire is included to provide Testers with the text if necessary at Part II. If the subject received the Take-Home Questionnaire at Part I and returned it at the start of this Session, you do not have to read these instructions. The closing script will guide you in distribution of the Take Home Instrument if necessary. Use this script if you distribute the Take Home Questionnaire at the end of this Assessment Session.