LIFE SPACE QUESTIONNAIRE

1. Background and Rationale

The Life Space Questionnaire measures mobility in terms of the spatial extent of a person's life. The purpose of the questionnaire is to determine a person's usual pattern of mobility during the month preceding the assessment. Life-space is defined based upon the distance a person routinely travels to perform activities over this time frame. The Life Space Questionnaire also determines how far and how often the person leaves her place of residence and the degree of independence she has. Lastly, the questionnaire explores the idea that "life space" often constricts with age.

2. Equipment and Supplies

• Black pen or No. 2 pencil

3. Safety Issues and Exclusions

None.

4. Participant and Exam Room Preparation

The Life Space Questionnaire should be administered in a quiet room, with minimal distractions.

5. Detailed Measurement Procedures

The Life Space Questionnaire is used to identify the distance through which a participant has moved during the four weeks prior to the assessment. Each level of life-space represents a distance further from the room where one sleeps.

- 0 = Mobility limited to the room where one sleeps
- 1 = Mobility limited to within one's dwelling
- 2 = Mobility limited to the space just proximal to one's personal living space (for instance, a porch, patio, or yard just outside the home or hallway outside of an apartment)
- 3 = Mobility limited to one's neighborhood
- 4 = Mobility limited to one's town
- 5 = Mobility outside one's town

These concentric levels of life-space are illustrated in the figure below. Definitions of life-space levels vary somewhat among people but are consistent individually. Our research indicates that 60% of subjects (both urban and rural) describe their

neighborhood as being within 1/2 mile of their home. Moreover, 92.5% agree that travel outside one's town is greater than 10 miles.

Life-Space 0 Bedroom Life-Space 1 Home Life-Space 2 Outside house Life-Space 3 Neighborhood Life-Space 4 Town Life-Space 5 Unlimited

LIFE-SPACE LEVELS

5.1 Defining Life-space Levels

The questions on the Life Space Questionnaire refer to the participant's activity within the past month prior to the day of the clinic visit.

It is critical to assess the degree of independent mobility for each level of life-space.

Notes:

- The questions refer to activities *just within the past month*. Sometimes a participant is temporarily limited (recovering from surgery or illness) and wants to provide information about their "usual" or "normal" activity. It is important to get the information that defines the participant's mobility just within the past month, not how they were before that, or how they expect to be in the near future. This applies to all aspects of the assessment, distance, frequency, and assistance needed.
- Do not skip any levels no matter how obvious the answers may appear. For instance, sometimes a person will say "no" to going anyplace within their neighborhood but will report going to town several times a week, so the higher level will be answered "yes". By definition, a participant who indicates they travel to their town must go through their neighborhood on the way to town. The computer analysis algorithm that we use to calculate variables related to life space

will give "credit" for participants going out of their neighborhood even though the participant may report that they did not. For all questions, you simply need to record the answer(s) provided by the participant.

- Ask all of the questions for each level. For a given level, if the participant answers "yes" to the first question, continue to ask the questions about frequency, aids and equipment, and personal assistance. For a given level, if the participant answers "no" to the first question, you can move onto the next level.
- Measures of assistance frequently change as one progresses up the life-space scale.
- The meaning of "neighborhood" and "town" is whatever the participant perceives it to be. Try not to define it for them. Sometimes subjects will ask if you want to know if they walk within their neighborhood. We are not defining the method used, but whether or not they get there, how often, and how independently.

Self-determination of neighborhood and town is suggested. (If mile demarcations are needed, the following are suggested to agree with self-defined distances.)

- Within one's neighborhood: less than 1/2 mile
- Within one's town: Outside one's neighborhood but within 10 miles of one's home
- Outside of one's town: 10 + miles
- Don't make the assessment harder than it is. Be sure to use the probes suggested above to determine the degree of assistance needed.

5.2 Administering the Life-Space Questionnaire

<u>Life-Space Level 1</u>

Ask the participant,

"During the past four weeks, have you been to other rooms of you home besides the room where you sleep?"

If the participant answers "Yes," record this on the form and proceed to the questions about "Frequency." If the participant answers "No", move on to the next level.

Ask the participant,

"How often did you get there?"

Read each of the answer choices and record the number assigned to her response in the space provided.

Following that, ask the participant both of the following questions, waiting for a response after each question:

"Did you use aids or equipment? Did you need help from another person?"

LifeSpace Visit9 Version 1.1 Score the response accordingly.

Life-Space Levels 2-5

Proceed with the remaining life-space level questions as indicated for Life-space Level 1 above.

6. Scoring

6.1 Personal assistance:

If a person attains a level only with the help of another person, "Personal Assistance" should be marked for that level. This includes persons who require someone to drive them places, someone to help them get onto a bus, or someone who needs accompaniment. If assistive devices are also used, the response remains "Personal Assistance."

For personal help, if the respondent generally has another person present "in case," they will be noted as needing personal help, so "Personal Assistance" should be marked for that level. If they use personal help when available but not always, they will NOT be noted as needing help since it is presumed they could go on their own. "No" will be marked for that level. For example, if the person reports that their son drives when he is available, but drives otherwise by herself, she is given credit for achieving that life-space level by herself. However, if she drives, but the son always has to be in the car with her, she is classified as needing help.

Note: If the person uses equipment to achieve a lower level life-space, by definition that person requires equipment to achieve all subsequent life-space levels. Similarly, if a person requires personal assistance to attain a lower level of life-space, by definition, the person requires personal assistance to attain all higher life-space levels.

For all questions, you simply need to record the answer(s) provided by the participant. The computer analysis algorithm that we use to calculate variables related to life space will correct inconsistencies in subject reports related to the use of equipment and personal assistance. For example, a person may report needing personal help to get out of bed in the morning, but then report that he can get around using a walker. In this example, after the computer analysis program is run, the person would be noted as needing personal help at all levels since he reported personal help to get out of bed.

6.2 Assistance from equipment:

If a person attains a level using an assistive device such as a cane, walker, or any device, and help from another person is not needed, "Equipment Only" should be marked for that level. Aids can also be furniture placed strategically in the room for balance, or a walker left next to a bed or chair to assist the person in rising or sitting. If a person has previously indicated using a cane or appears to use a case, the interviewer should prompt, starting at Level 1, "Did you use your cane to get to" "If the participant says no,"

the interviewer would prompt for use of the cane at each successive level. If the participant "sometimes" use the equipment and/or take it along "in case," the participant should be marked as using the equipment or "Equipment Only".

6.3 No assistance or help:

Independent mobility means that the person attains a level without help from any equipment or assistive devices and without the help of a person. If someone reports that they did not need personal assistance or assistance from equipment, "No" will be marked for that level.

6.4 Transportation:

At the point in the Life-Space Assessment that transportation is indicated as the method of travel, the interviewer needs to probe to see if the person travels independently (by themselves.) The transition usually occurs at Level 4, possibly at Level 3. The interviewer should probe to see if the respondent drives or walks within the neighborhood if the respondent does not so indicate. For each of these levels, the interviewer can specifically ask, "Do you drive or does someone else drive?" "Does ____ go with you every time you go ____ ?" "Do you get on the bus or van by yourself or does somebody have to help you?" (Using public transportation independently gives the person full credit for independence.)

If a person has never driven, they are coded as needing personal assistance unless they are able to use public transportation completely on their own. If they are able to use public transportation on their own, then this would be coded as not needing personal assistance. This is because of the underlying conceptualization of life-space, where people are going and their potential limitations if they did not have a driver available.

7. Procedures for Performing the Measurement at Home

Same as for clinic visit.

8. Alert Values/Follow-up/Reporting

None.

9. Quality Assurance

9.1 Training Requirements

The examiner requires no special qualifications or prior experience to perform this assessment. Training should include:

Read and study manual

- Attend SOF training session on techniques (or observe administration by experienced examiner)
- Practice on volunteers
- Discuss problems and questions with local expert or QC officer

9.2 Certification Requirements

- Complete training requirements
- Conducts exam while being observed by QC officer

9.3 Quality Assurance Checklist

□ Subject given correct instructions and form completed correctly.