## INSTRUCTIONS FOR THE SLEEP HABITS QUESTIONNAIRE (SHQ)

## I. General Instructions

The SHQ is designed to be self-administered. ARIC Sleep-PET Participants should complete this form immediately after consent, at whichever visit is first of the Sleep-PET study visits.

## II. Completion of Questionnaires

Staff should not advise or otherwise encourage participants to consult with others as they complete the questionnaire. Staff should ask participants to: Please read and fill out this questionnaire by yourself, without discussing questions with anyone.

If participants have questions about how to fill out the SHQ, Staff should adhere to the permitted clarifications below. Fortunately, most items are self-explanatory and are unlikely to raise questions. However, if clarification is needed, see clarification instructions in coding and editing instructions. The participant may need assistance, in particular, in following the skip patterns.

If participants are illiterate, have poor eyesight or other conditions that preclude reading and writing, a Staff Member is permitted to read the items and mark the answers if necessary.

After completion of the questionnaire, Staff should check it for completeness/ accuracy and any missing data or discrepancies can be double-checked with the study participant.

The instructions that follow outline the permissible clarifications and coding instructions on a question by question basis. This protocol should be consistently adhered to. Any deviations from protocol should be referred to the study coordinator.

## III. Review for Completeness

Questionnaires should be examined for completeness and accuracy prior to data entry into CDART. See question by question specification of codes to clarify or correct data on questionnaire. Any questions regarding how data are coded that are not covered in this document should be reviewed with the study coordinator.

## IV. General Instructions

Staff should complete items 0a and 0b, and enter the participant ID number, before giving the paper to the participant.

The participant should be given a black pen to use to complete the form.
Other important points:

- Leading zeros are not required to fill in all fields of a variable.
- Missing data. Data not completed by the participant will be left as blanks; please verify with the participant why he/ she left an item blank. If the participant indicates that they don't know the answer to a question, the staff member should write in "DK" in the margin next to that item, and when entered into CDART should enter a Field Status to indicate the response "doesn't know".
- If a range of values is given, take the midpoint. If data are collected only as integer values, then find the midpoint and round up to nearest integer. For example, $6-8$ cups a day is 7 cups. The midpoint of the range $6-7$ cups a day is 6.5 and should be rounded up to 7 cups as the final answer.
- For questions where "hours" and "minutes" are to be specified, convert fractional hours to minutes. Both hours and minutes fields must be completed, even if the response is 0 . For example, if a respondent indicates $3 / 4$ of an hour, then neatly " $X$-out" in red the $3 / 4$ and recode data to 0 "hours" and 45 "minutes." Please ask the participant to write in "AM" or "PM" after the specified time. When this is entered into CDART, please be sure to type AM or PM after the time.
- By definition, midnight is 12:00 A.M.
- If 2 responses are given for a question, choose the response closest to the "normal" response and X -out the other response. "Normal" is defined on a question-by-question basis. For example, the question regarding "How loud is your snoring?" is coded on a scale of 1 to 4 . If the respondent has circled a 2 and 3 or has put a mark between 2 and 3 , then code final response as 2.


## Question by Question Specifications

Items 1 and $\mathbf{3}$ ( $\mathbf{a}$ and $\mathbf{b}$ ). If an individual has a job, they report the usual time they FALL ASLEEP on their work days for Part A and for their non-work days for Part B.

If an individual does not work, then the individual should report the usual time for weekdays (Monday through Friday) for Part A and the usual time for weekends (Saturday and Sunday) for Part B.

If no AM/PM designation is indicated, look at other questions with sleep and wake up times (Questions 1 and 3 ) to determine, if possible, if the missing data are AM or PM. Please try to clarify with the participant if these data are missing from both items.

Data for Questions 1.A. and 1.B. should be visually compared to data for time usually WAKE UP (Questions 3.A. and 3.B., respectively) for consistency. Inconsistencies must be rectified. It is possible that someone may actually sleep during the day so care must be taken when checking for consistencies between FALL ASLEEP time and WAKE up time.

NOTE: Midnight is 12:00 AM by definition. A major point where inconsistencies will occur is when the respondent misspecifies 12 midnight as PM instead of AM.

Item 2. If a response is given in hours, please convert to minutes. If a range is given, take the midpoint. If midpoint is a fraction of a minute, the midpoint should be rounded up to nearest minute. Example: 10-20 minutes should be coded as 15 minutes. 10-15 minutes should be coded as 13 minutes.

If two times are given, a usual time and a special circumstances time, code the usual time. Example: "Usually it takes 10 minutes but if my spouse is snoring it takes 30 minutes."
Code as 10 minutes.

Items 4-5. Workdays/ weekdays should be defined the same way as for items 1 and 3.
Responses in hours should be written by the participant, in hours and 15-minute fractions (for instance, 6 hours 45 min ). When entered into CDART, the time given be rounded to the nearest hour. Example: 8 to 9 hours should be coded as 9 hours.
8 and a half hours is coded as 9 hours
8 to 8 and a half hours is coded 8 ( 8.25 rounds to 8 )
If two times are given, a usual time and a special circumstances time, code the usual time.
Example: "Usually 8 hours except if I have business travel and then it's only 4 to 5 hours."
Code as 8 hours.
Item 6. Instruct the participant to write in "0" if he/ she does not take any naps.
Data entry into CDART:
Number of times is a 2-digit field. Permissible range: 0 to 50
If a range is given, take the midpoint. If midpoint is a fraction, round to nearest integer value.
Example: 6 or 7 naps should be coded as 7 ( 6.5 rounded up to 7 ).
10 to 12 naps should be coded as 11 naps.
Items 7a-g. The participant should select the best response.
If someone writes in a comment such as Not Applicable, please enter that into CDART.
Item 8 and 9. The participant may need assistance in following the skip pattern on the form, if the response to item 8 is "no", "don't know", or item 9 is "do not snore any more".
This is a lead-in question for questions 9 through 13. Clarification:
"Ever" refers to 1 or more times at any time in the past, regardless of whether it was recent.
If responses are given for any of questions 9-13, even if the participant checked off "no", "don't know", or "do not snore any more" for items 8 and 9, enter data into CDART for these items as given on the form.

EXCEPTION: If a valid response is given for any of questions 9 through 13, then the "No," "Don't Know," or missing on question 8 is to be changed to a "Yes" on the questionnaire and entered into CDART as "Yes". "Valid" responses, for the purposes of leading to a change in item 8, are defined as -- Q9: values 0 to 4; Q10: values 1 to 4; Q11: any \# of years, except 0 or Don't know; Q12: values 1 to 3; and Q13: only the value of 1 .

Item 9. "How often" refers to the number of nights per week that any snoring is thought to occur. (Not how many times per night or how much of the night).

Item 11. SKIPPED data are to be left blank. However, if a response is given, enter data as given. If a range is given, take the midpoint. If midpoint is a fraction, round to nearest integer value.
Example: 5 or 6 years should be coded as 6 ( 5.5 rounded up to 6 ).
10 to 12 years should be coded as 11 years.
Item 13. If the participant asks for clarification about what would consider surgery for snoring, you can ask the following question:
Has a physician ever used a laser to tighten your throat tissue ("LAUP"), or have you ever had tissue in your throat or airway removed by cutting, specifically to reduce your snoring?

Record treatment as YES, even if the respondent indicated that it was not effective, or that they still snore.

Item 14. If answer is NO or Don't Know, then participant should skip question 15.
Item 15. If any clarification questions are needed, you can clarify, "How often do you have times when it seems like you are holding your breath or have a pause in your breathing, or have an "apnea" for about 10 seconds or so?"

If a response is given, even if this item was to have been skipped (based on response to item 14), enter data as given.

Items 16a-j. Please advise the participant on the skip pattern as appropriate, based on his/ her response.
16b. You may need to remind the participant that this was over 15 years ago, if they do not recall what this is referring to ("your SHHS test"). This is the Sleep Heart Health Study test.

For each of the items 16c-16i, the participant should mark off an item as "yes" even if he/ she felt that the treatment has not been effective.

Other specific notes:
For 16f. A mouthpiece may include: tongue retaining device or dental device.
For $\mathbf{1 6 g}$, Code as YES if the respondent indicated another term for positive pressure system, such as trade name.
For 16h, Surgery includes "UPPP" (UvuloPalatoPharyngoPlasty), mandible or jaw advancement, or "trach", hole in windpipe, or "tracheotomy"

Item 17. If respondent indicates that use of oxygen is sporadic, or only a few nights a month, ask them to mark "yes", and then write this in the margin and enter it as a notes file when the data are entered into CDART.

Items 18a through 18i. If someone writes in a comment such as Not Applicable, code "never" when entered into CDART.

Item 19. If clarification is needed, a location is considered as "near" if the person can hear you talking loudly from that location.

