I. Background

The purpose of the year four follow-up phone interview for HCHS/SOL is to document medical events occurring since the third annual follow-up interview, maintain and update cohort contact information, and to ascertain vital status. The year four follow-up interview is to be conducted by telephone in either English or Spanish. The interview should occur approximately 48 months after the baseline examination. Future annual follow-up interviews (contact year 5) will continue to occur approximately every 12 months from that same baseline anniversary date. The timing of the annual follow-up interviews is described in more detail in Manual 16, Follow-up available on the HCHS/SOL website.

II. Missing items/Forms Data entry protocol

It is important that the AFU interview forms follow the establish data entry protocol used in all study forms as follows:

- For items within a questionnaire that will be missing for any reason should be set to “Unresolvable, CTRL+U.” Use Problem menu on DMS.
- If items will be “unresolvable” from a certain point forward within the form; set “Rest of form Unresolvable.” Use Problem menu on DMS.
- If the complete form should be missing, set the forms to “Permanently Missing.” Use Changes menu on DMS.

III. Coding Annual Follow-up Interview Scheduling Failures

Background:

All pending interviews need to be closed at the end of a contact window. During the AFU-Y4 Re-Certification training session, the question was raised on how to code AFU scheduling failures, also called “soft-refusals”, on the General Health Status part of the questionnaire. These instructions are for those cases where scheduling and completing the interview was incomplete after repeated attempts with the study participant and/or their alternates.

Participants who emphatically refuse an interview and all further contact with HCHS will not be contacted for the study again. Therefore, it is important that we distinguish between an evasive, “soft-refusal”, participant and still keep them active for future AFU contacts vs. one that is a “hard-refusal” where further contact is not possible.

To ensure consistency in DMS data entry for scheduling failures for any given AFU period, the CC has prepared the following guidelines for completing the forms. The goal is to code these participants (soft-refusals) in a way that will allow them to re-appear for in future AFU contact lists. Below is the coding scheme by AFU year for the Hard-Refusals and Soft-Refusals using the following working definitions:

**Hard-refusal** occurs when participant that clearly states that he/she does not want to be called ever again for any HCHS/SOL study related matter.

**Soft-refusal** is a case where the participant says they are not available for an interview at the time of call, but does not directly state that they do not want to be contacted ever again. They may even propose an alternate day/time which fails to be completed.
How to Complete the Interview Forms for Hard vs. Soft Refusals:

**Hard Refusals** - AFU Y1, Y2, Y3, Y4, code these as: “Contacted and refused interview” GHEA1=2

**Soft Refusal (participant alive, but elusive)** - AFU Y1, Y2, Y3, Y4, code these cases as:
- Y1 and Y2: “Contacted and alive” GHEA1=1
- Y3 and Y4: “Contacted and alive, agrees to interview” GHEA1=1

**Soft Refusals, special data entry instructions**:

1) GHEA-forms AFU-all-years use GHEA1=1. This code will not activate any skip patterns for the rest of the AFU forms, therefore you would need to skip these sections manually using an option to suppress queries.

2) After coding GHEA1=1, you would need to set the remainder of the AFU form series, for which you will not get any data for that year, as “Unresolvable.”

3) Setting forms as “Unresolvable” It is important that you set the forms as “unresolvable” so you can have access to the form if needed. You might get to interview the participant within the window and this will let you change the values on the form by simply accessing the form and entering the responses obtained. If you set the form as “permanently missing” the data entry process can get complicated if the participant is contacted and interviewed for that year at a later date because the missing form placeholders would need to be deleted first before interview data could be entered.

   a. Setting the rest of form “Unresolvable.” This is the quickest way to set a full form as unresolvable. Always remember to enter the date and staff ID, if required in the form. Then: Go to the DMS Menu: Problem/Rest of Form Unresolvable (CRTL+V). This action will put “=” signs in all the questions of the forms, with just one command.

   b. Setting just one Value/Question as “Unresolvable.” When you encounter a need to set only one value as unresolvable you can use the DMS menu that will do so as follows: Problem/Unresolvable (CRTL+U). This menu will put “=” signs in the field that is active (only in one field.)

If you have any questions or comments please contact Nana Abreu at mdla_abreu@unc.edu or 919-962-3254.

**IV. Annual Follow-Up Procedures**

**A. Timing of the follow-up interview**

The target date of the year four follow-up phone interview is the four-year anniversary of the participant's baseline interview at the field center. For example, if the participant’s baseline visit interview was on October 1, 2008, then the target date for the year four follow-up interview is October 1, 2012. The initial call for annual contacts is to be made no more than three weeks before the target date. Ideally, the annual follow-up interview takes place as closely as possible to the participant’s fourth-year follow-up target date. However, it may require repeated attempts to contact the participant before an interview can be completed. All efforts should be used to complete the year four follow-up interview no later than 6 months after the target date. If for some reason contact is not made within 6 months after the participant’s follow-up target date, the year four annual follow-up will be set to missing. The year five follow-up interview form should be used when the participant’s year 5 anniversary occurs. This procedure is described in more detail in Manual 16.
B. Performing the Interview

General Instruction
Probing is an appropriate technique to seek further information, provoke further discussion along a certain line of thought or explanation, or to question the respondent. In general, and unless specifically countermanded in the QxQ instructions of the interview, probing is appropriate when an answer is unclear, incomplete, inconsistent or no response is given. The best and most frequently employed probe is silence. In a silent probe, the interviewer pauses or hesitates and waits for the participant to answer. What appears to be dead time to the interviewer may represent the participant’s review of a lifetime of events. Other types of probing include the following methods:

- repetition of the original question
- channeling (“tell me more about...”)
- clarification (“exactly what was the date you went to the emergency room?”)
- elaboration/continuation (“what happened next?”)
- encouragement (“I see, um, huh, hmmm”)
- completion (“anything else?”; “can you tell me anything more about that?”)

V. Question by Question Instructions

Once the interviewer established contact with someone on the phone, the interviewer begins the interview by reading the following introduction script:

“Hello, my name is (insert your name), and I am calling to follow up with (insert name of participant) about the Hispanic Community Health Study/Study of Latinos a health study in which s/he is currently enrolled. Is s/he available?”

Section A. (General Health Section for data entry begins here.)

Q1 Participant status
If the participant is not available, try to establish a convenient time to call back to talk to him/her by saying:

“When would it be convenient to call back? .......... Thank you. I will call again.”

If the interviewer establishes that they are talking to the participant, follow up by saying the following:

Hello, (participant name), this is (interviewer name) with the Hispanic Community Health Study / Study of Latinos. I’m calling to see how you have been since your last telephone interview and to update our SOL records. Do you have a few minutes to speak on the phone?

If the participant response that they are willing and able to complete the interview, record CONTACTED and ALIVE for Q1 and thank them for agreeing to speak with you. Then quickly but gently follow up by introducing the interview in the following way:
We’d like to gather information about your general health and about specific medical conditions that you may have had in the past year. I will ask you some questions about your health since the last telephone interview with you on (date of last follow-up call). I want you to focus on what happened from (date of last follow-up call) until today. Then GO to Q2.

If the participant responds that they either not able or willing to complete the interview at the time of the call try to establish a time to call back by saying:

“*When would it be convenient to call back?.........Thank you. I will call again.*”

When an HCHS/SOL participant cannot speak on the telephone with an AFU interviewer, but can respond to questions through an intermediary or has an alternate respondent, a limited number of the questions on the AFU form are administered. If it is not possible to conduct the full interview, VITAL STATUS question 1, HOSPITALIZATIONS 3, 4-4f, and TRACKING 49-59 are the most important.

If the HCHS/SOL participant is incapable of speaking on the telephone with an AFU interviewer, and is also NOT capable of responding to the questions even through some other intermediary, the HCHS/ SOL interviewer completes the questions on VITAL STATUS (question 1), and TRACKING (49-59) from another respondent contact source.

If the interviewer establishes that the participant is DECEASED, the interviewer offers condolences. Record this information in Q1d (Not contacted, reported deceased). Then the interviewer gently collects and records the date and the location (city, state, and country) of the death in the space provided (Q1a-b).

**Q1a** What was the date of death?
Collect and record date of death.

**Q1b** Where did the death occur?
Collect and record cite, state, and country where the death occurred.

**Q1c** Do you know if (decedent's name) was hospitalized or visited an emergency room for any reasons since (data of center visit) and his/her death?

If the informant responds “NO”, thank the respondent, expressing condolences for their loss, and END THE INTERVIEW.

If the informant responses “YES “, the interviewer gently goes to “Section B Hospitalizations and Emergency Room Events” (Questions 3-4). The interviewer modifies Q3 slightly to ask if the decedent (using his/her name) had been hospitalized or seen in an emergency room since his/her SOL clinic visit date (see Q3). If the informant responds “NO” or “UNSURE” to Q3, the interviewer concludes the interview at that point by again expressing condolences and saying goodbye. If the informant is not comfortable answering Q3, record UNSURE and end the interview by once again expressing condolences and saying goodbye (see death investigation protocol in the Follow-up Manual).
If the informant responses “YES” to Q3, then the interviewer continues through to Q4e until all hospitalizations and emergency room visits have been reported. When there are no more hospitalized or emergency room visits to report, record “NO” for Q4e, and end the interview by expressing their condolences and saying goodbye (see death investigation protocol in the Follow-up Manual).

**General Health**

**Q2** Since our last telephone interview with you on (date),, would you say, in general, your health is Excellent, Very good, Good, Fair, or Poor?

Read the question, gently stressing the time frame, and pausing slightly between each of the response categories. Read all five categories, and record the participant’s selection. When necessary, re-read the question for clarification.

**Section B. Hospitalized and Emergency Department Events**

(HOE screen for data entry begins here.)

The goal of this section is to record all the episodes where the participant was admitted to the hospital or seen at an emergency department. Although the more technically correct term for an emergency medical facility is “emergency department”, the most commonly used term will likely be “emergency room”. For the purpose of this section, consider an emergency department and emergency room as equivalent.

For the purpose of this section, admission to the hospital includes any stay in the hospital even if it is not overnight or less than 24 hours. Visits to a physician’s offices or clinics located in a hospital should not be recorded as an admission to the hospital. Outpatient visits should not be included as either hospital admissions or emergency department visits.

Begin this section by introducing this section. Take care to clearly communicate that the time focus of the question is since the SOL center visit.

“The following questions are about any hospitalizations or visits to an emergency room you may have had Since our last telephone interview with you on (date).”

**Q3** Since our last telephone interview with you on (date), have you at any time been admitted to a hospital or seen in an emergency room?

This question asks the participant to recall hospitalizations in acute or chronic care facilities, such as hospitals. It also asks the participant to recall visits to an emergency room. Stress that if there were several hospitalizations or emergency room visits since their last telephone interview on (date) that you would like to ask some question about each of these separately, starting with the first occurrence since their last telephone interview.

If the participant or alternate responds “No” then this section will be skipped. If the participant responds that they are unsure, probe to find out if there is anything in the question that the participant didn’t understand. If the participant is still unsure, or if using an alternate respondent who is uncertain, then record “UNSURE” and this section will be skipped. If the participant or alternate respondent answers that the participant has been admitted to the hospital or seen at an emergency room then go to Q4.
Q4 Was this visit to the emergency room only, a hospital admission only, or a visit to the emergency room that resulted in being admitted to the hospital?

This question asks the participant to identify whether the event was a visit to an emergency room, a hospital admission or both. If a participant reports that s/he went to an emergency room, which led to an admission to the hospital, then record this as BOTH. If a participant went to an emergency room and then was released, record this response as EMERGENCY ROOM. If the participant indicates that s/he was admitted to a hospital without first going to the emergency room, record HOSPITAL ADMISSION.

Q4a What was the main reason for going to the (insert emergency room or hospital) that day? (Check one and do not read choices)

This question asks the participant to recall the nature of this episode. When asking the question, be sure to insert the appropriate response from question 4 above. For example, if the participant responded to Q4 by saying they went to an emergency room for several hours and then were sent home, insert the phrase “emergency room” into these questions (“What was the main reason for going to the emergency room?”). Do not read the responses. Listen to what the participant describes and record the category that is the best match. If there is no obvious match with items 0-7, record OTHER (response 8) and record the reason in the space provided under “specify”. If the participant reports that a hospitalization or emergency room visit was for several reasons, record the one that fits any of the categories listed (0-7). For example, if the participant reports that they called 9-1-1 because of chest pain and dizziness that led to a fall and cut on their head, record CHEST PAIN (response 1). In many cases, the participant will not use the terms listed in questions 4a. If it is not possible to select a main reason from the participant’s first response, consider gently probing to gather enough information to make a reasonable categorization of the main reason for this event (e.g. “Can you tell me more about this event?”). If no additional information is forthcoming, record OTHER and specify the exact description of the episode provided by the participant.

Q4b What was the date of this event?
Collect and record the approximate date of the visit. This should be the first date of the event. For example if a person reports being hospitalized for 3 days, record the date of the first day. Stress that what you are seeking is the approximate date of the first event since their last telephone interview. If there are several events that have occurred since their last telephone interview, explain that you would like to take each of these in order.

Q4c What is the name of the medical facility?
Collect the name of the hospital or emergency room visited for this reported event.

Q4d What is the address of this medical facility?
Collect the address of the hospital or emergency room visited for this reported event, including city and state.

Q4e For clarification or our records, under what name is this record?
This question asks for the participant to clarify under which name is the record. Since HCHS/SOL will be attempting to locate the record, it is important for the interviewer to discern the exact names used for the admission or visit to the emergency room.
Q4e1 First Name
Q4e2 Second Name
Q4e3 Last Name
Q4e4 Second Name

Q4f Were you admitted to a hospital or seen at an ER at any another time since your SOL center visit?

This question asks for the participant to recall if there was another episode that led to them being hospitalized or seen at an emergency room since their last telephone interview. If a participant reported that they went to an emergency room and then were admitted to the hospital the same day as a continuation of the emergency room visit (Q4 above equals BOTH), do not consider the hospitalization as a separate event from the emergency room visit.

Section C. Out-Patient Self-Reported Conditions (OPE Section for data entry begins here.)

In this section we seek information about specific conditions that led seeking and receiving medical attention as an outpatient. For the purposes of this section, outpatient treatment is defined as episodes other than a hospital admission or care in an emergency room. This section applies to visits to a doctor’s office or a non-emergent medical care facility. Start this section out by saying the following introduction:

“Now I would like to ask you about conditions that may have resulted in you seeing a doctor or health profession at a clinic or doctor’s office, but not actually being admitted to the hospital or visiting an emergency room.”

By asking “Since our last interview with you has a doctor or health professional said…”, we are interested in identifying newly occurring, or newly diagnosed conditions. If a participant responds by saying “Yes, my doctor told me that I have chronic bronchitis and I have had this for several years” the response to this question (question 5) is No. If the answer provided by the participant to questions in Section C suggests to the interviewer that this may not be a condition that has newly occurred since the last AFU interview, the participant is asked to clarify whether this is the first time a physician has said that she/he has this condition. Only new diagnoses of a condition since the last contact with the participant are recorded as Yes.

Q5 Since our last telephone interview with you on (date), has a doctor or health professional told you that you had emphysema, chronic bronchitis, or chronic obstructive pulmonary disease (COPD)? This does not include doctor’s visits for tuberculosis or TB.

This question asks the participant to recall whether in the past year since their SOL visit they had a diagnosis of COPD in an outpatient setting. **Be careful to stress that this does not include doctor visits for tuberculosis.**

It is likely that a doctor or health professional used other terms such as emphysema or chronic bronchitis. If the participant indicates they had such an event, the interviewer moves on to ask specific questions about this episode. If the participant denies any outpatient diagnoses of COPD, emphysema or chronic bronchitis then the interviewer skips to Q6.
5a-c  This series of questions is intended to collected information about specific tests that might have been done in conjunction with the outpatient visit for COPD emphysema or chronic bronchitis. Introduce the series of questions 5a-c by asking the following:

“Did your doctor or healthcare professional order any of the following tests to help make the diagnosis?”

Q5a  Breathing test or pulmonary function test?
Collect and record whether a breathing test or pulmonary function test was ordered or performed. For the purposes of this question, if a test was ordered and attempted but not completed this is sufficient to record YES to questions 5a.

Q5b  Chest X-ray?
Collect and record whether a chest X-ray was ordered or performed. For the purposes of this question, if a test was ordered and attempted but not completed this is sufficient to record YES to questions 5b.

Q5c  CT Scan of your chest?
Collect and record whether a computed tomography (CT) scan of the chest was ordered or performed. For the purposes of this question, if a test was ordered and attempted but not completed this is sufficient to record YES to questions 5c.

Q5d  Were you told by a doctor or health professional that you were having an attack, worsening or an exacerbation of your emphysema, chronic obstructive pulmonary disease (COPD), or chronic bronchitis?

The purpose of this question is to determine if the recalled episode was actually an exacerbation of their emphysema, chronic obstructive pulmonary disease (COPD), or chronic bronchitis. It is likely that the term “exacerbation” may not be well understood by the participant. Take time to clearly communicate the terms “attack” and “worsening”. For the purpose of this question, any attack, sudden onset, increase in severity, or increase in frequency of symptoms is sufficient to record YES.

Q5e  Did the doctor or health care professional prescribe a change in your medication, such as increasing your inhalers, oxygen or pills for your lungs or prescribing a steroid pill for your lungs?

The purpose of this question is to collect information that helps in determining if the recalled episode was an exacerbation. A change in medication in response to an acute event is evidence of a true exacerbation of the condition. Collect and record if the participant had their medication changed as a result of this episode.

Q6  Since our last telephone interview with you on (date), has a doctor or health professional told you that you had asthma?

This question asks the participant to recall whether in the past year since their SOL visit they had a diagnosis of asthma in an outpatient setting. If the participant indicates they had such an event, the interviewer moves on to ask specific questions about this episode. If the participant denies any outpatient diagnoses of asthma then the interviewer skips to Q7.
Q6a-c  This series of questions is intended to collected information about specific test that might have been done in conjunction with the outpatient visit for asthma. Introduce the series of Q6a-c by asking the following:

“Did your doctor or healthcare professional order any of the following tests to help make the diagnosis?”

Q6a  Breathing test or pulmonary function test? Collect and record whether a breathing test or pulmonary function test was ordered or performed. For the purposes of this question, if a test was ordered and attempted but not completed this is sufficient to record YES to Q6a.

Q6b  Chest X-ray? Collect and record whether a chest X-ray was ordered or performed. For the purposes of this question, if a test was ordered and attempted but not completed this is sufficient to record YES to Q6b.

Q6c  CT Scan of your chest? Collect and record whether a computed tomography (CT) scan of the chest was ordered or performed. For the purposes of this question, if a test was ordered and attempted but not completed this is sufficient to record YES to Q6c.

Q6d  Were you told by a doctor or health professional that you were having an attack, worsening or an exacerbation of your asthma?

The purpose of this question is to determine if the recalled episode was actually an exacerbation of their asthma. As previously, it is likely that the term “exacerbation” may not be well understood by the participant. Take time to clearly communicate the terms “attack” and “worsening”. For the purpose of this question, any attack, sudden onset, increase in severity, or increase in frequency of symptoms is sufficient to record YES.

Q6e  Did the doctor or health care professional prescribe a change in your medication, such as increasing your inhalers, oxygen or pills for your lungs or prescribing a steroid pill for your lungs?

The purpose of this question is to collect information that helps in determining if the recalled episode was an exacerbation. A change in medication in response to an acute event is evidence of a true exacerbation of the condition. Collect and record if the participant had their medication changed as a result of this episode.

Q7  Since our last telephone interview with you on (date), has a doctor or health professional told you that you had diabetes or high sugar in the blood?

If the answer is No or the participant is UNSURE, then go to Q8.

Q7a  Did the doctor recommend any new or different treatments?

The purpose of this question is to determine whether or not the participant was treated for this reported diabetes. If treatments such as medications were recommended but the participant didn't actually obtain and/or take the medications record YES. If the answer is No or the participant is UNSURE, then go to Q8.
Q7b What treatment was recommended?
Do not read the response options. Listen to the participant’s response and prompt if necessary for understanding. Record the treatments in the category that is most appropriate. If you are not sure whether a recalled treatment fits into a category, record other and specify the treatment in the space provided.

Q8 Since our last telephone interview with you on (date), has a doctor or health professional told you that you had high blood pressure or hypertension?
If the answer is No or the participant is UNSURE, then go to Q9.

Q8a Did the doctor recommend any new or different treatments?
The purpose of this question is to determine whether or not the participant was treated for this reported high blood pressure or hypertension. If treatments such as medications were recommended but the participant didn’t actually obtain and/or take the medications record YES. If the answer is No or the participant is UNSURE, then go to Q9.

Q8b What treatment was recommended?
Do not read the response options. Listen to the participant’s response and prompt if necessary for understanding. Record the treatments in the category that is most appropriate. If you are not sure whether the recalled treatment fits into a category, record other and specify the treatment in the space provided.

Q9 Since our last telephone interview with you on (date), has a doctor or health professional told you that you had high blood cholesterol?
If the answer is No or the participant is UNSURE, then go to Q10.

Q9a Did the doctor recommend any new or different treatments?
The purpose of this question is to determine whether or not the participant was treated for this reported high blood cholesterol. If treatments such as medications were recommended but the participant didn’t actually obtain and/or take the medications record YES. If the answer is No or the participant is UNSURE, then go to Q10.

Q9b What treatment was recommended?
Do not read the response options. Listen to the participant’s response and prompt if necessary for understanding. Record the treatments in the category that is most appropriate. If you are not sure whether a recalled treatment fits into a category, record other and specify the treatment in the space provided.

Section D. Self Report Of Events Since Baseline Visit
This section asks the participant about health conditions reported by a Doctor or a Health Professional since their first SOL center visit 4 years ago. By asking “Since their first SOL interview with you has a doctor or health professional said…”, we are interested in identifying newly occurring, or newly diagnosed conditions. If a participant responds by saying “Yes, my doctor told me that I have atrial fibrillation and I have had this for several years” the response to this question (question 10) is No. If the answer provided by the participant to questions in Section D suggests to the interviewer that this may not be a condition that has newly occurred since the last AFU interview, the participant is asked to clarify whether this is the first time a physician has
said that she/he has this condition. Only new diagnoses of a condition since the last contact with the participant are recorded as Yes.

Begin this section with the following transition statement, gently stressing the time reference, “your SOL center visit 4 years ago.”

“Now I would like to ask you about symptoms you may have had since our last telephone interview with you on (date).”

Q10. Since our last telephone interview with you on (date), has a doctor or health professional told you that you had atrial fibrillation?

Question assesses doctor-diagnosed atrial fibrillation, or specific type of abnormal heart beat (rhythm) which affects the two upper chambers of the heart. Atrial fibrillation can cause sensations of palpitation, chest pain and heart failure. Not all palpitations or abnormal heart rhythms are atrial fibrillation, so it is important to check the “yes” box only if the participant indicates that a physician specifically diagnosed atrial fibrillation.

Q11. Since our last telephone interview with you on (date), has a doctor or health professional told you that you had heart failure?

Questions assess doctor diagnosed heart failure. Another clinical name for this condition is congestive heart failure or congestive cardiac failure. This diagnosis covers a variety of conditions in which the heart is unable to pump a sufficient amount of blood through the body. Heart failure should not be confused with heart attack or myocardial infarction.

Q12. Since our last telephone interview with you on (date), has a doctor or health professional told you that you had a blood clot in your leg vein or lung requiring blood thinning medicine?

Question assesses doctor-diagnosed blood clot in a leg vein or lung which required blood thinning medication. Blood clots are also known as a thrombus or thrombi. Examples of blood thinning medication include heparin, warfarin or coumadin. If the participant indicates that they had a doctor-diagnosed clot that was not treated with medication, then you should check the “no” box for this question.

Q13. Since our last telephone interview with you on (date), do you often have swelling in your feet or ankles at the end of the day?

Do the ankles or feet (lower extremities) increase in size by evening as evidenced either in a noticeable increase in size, tightness in socks/stockings, or shoes. If the participant requests guidance in defining “often” the interviewer provides a non-directive synonym, such as “frequently” or “on most days”. If based on this the participant still is unable to answer, the definition of “often” given to the participant is “on most days of the week, for at least one month.” If the swelling is unilateral (affects only one foot or ankle) record “No”.

Q14. Since our last telephone interview with you on (date), are there times when you wake up at night because of difficulty breathing?

Has the participant ever woken up because of difficulty in breathing on more than one occasion (e.g. ‘are there times’ means events that happened more than once).
Q15. Since our last telephone interview with you on (date), are there times when you have been troubled by shortness of breath when hurrying on level ground or walking up a slight hill?

Ask about being troubled by shortness of breath when hurrying on level ground or up a slight hill.

Q16. Since our last telephone interview with you on (date), are there times when you stop for breath when walking at your own pace on level ground?

This question inquires about shortness of breath in the context of active movement in a normal stride and pace of walking (not running or walking fast).

Q17. Since our last telephone interview with you on (date), are there times when you have difficulty breathing when you are not walking or active?

This question is asking about difficulty in breathing while at rest which could be sitting, standing, or lying down.

Q18. Since our last telephone interview with you on (date), have you had a cough on most days or nights of the week during at least 3 months in a row?

Ask the participant to indicate if they have had a cough on most days or nights of the week, since their SOL clinic visit, for at least 3 months in a row. Inform the participant that “most” means at least 4 days or nights per week.

Q19. Since our last telephone interview with you on (date), have you brought up phlegm from your chest on most days or nights of the week during at least 3 months in a row?

Ask the participant to indicate if they have brought up phlegm from their chest on most days of the week during the past 3 months in a row. Remind the participant that “most” means at least 4 days or nights per week.

Q20. Since our last telephone interview with you on (date), have you had wheezing or whistling in your chest?

Ask if the participant to indicate if they have had wheezing or whistling in their chest since their SOL clinic visit. Participants who respond no or are unsure are skipped to Q21.

Q20a. Have you had an attack of wheezing or whistling in the chest that has made you feel short of breath?

Ask if the participant has ever had an attack of wheezing or whistling in their chest which made them short of breath.

Q21. Since your SOL clinic visit on (date), has a doctor or health professional told you that you have sleep apnea?

Sleep apnea is present when there are long pauses in breathing during sleep (e.g., 10 or more seconds between breaths) which cause lowered circulating oxygen levels in the bloodstream. This question is used to record any doctor-diagnosed sleep apnea disorder. Feedback from the sleep monitoring sections of the baseline HCHS/SOL report are not regarded as a clinical diagnosis when responding to this question because that data is a
research study result. Interviewer can also use the following text in Spanish to explain apnea: Apnea – que deja de respirar mientras duerme. Participants who respond no or are unsure are skipped to Q27.

Q21a. Has your sleep apnea been treated with any of the following? (check all that apply)

This question is only asked if the participant responds “Yes” to Q26, apnea. Assess whether the participant has been prescribed a CPAP or BIPAP machine to treat their sleep apnea. A continuous airway pressure (CPAP) device uses a small compressor to pump a controlled stream of air through a mask worn while sleeping. A bi-level positive airway pressure (BIPAP) device works in a similar fashion except that it provides differing air pressure level during breathing in and while exhaling.

Q22. How often do you snore now?
Ask the participant to estimate his/her frequency of snoring over a typical week (number of nights per week.) If the participant’s usual sleep time is in the day (i.e., shift workers), he/she should estimate his sleeping frequency during his longest period of sleeping in the day. They can report these symptoms based on his own perceptions or based on what others have told him. He does not have to judge how loudly his snoring was to answer this question. If he only knows how often he snored in the past (because there were people who witnessed his sleep in the past but not the present) they should answer the question based on the most recent information he/she is aware of.

Participants who respond never or don’t-know are skipped to Q28.

Section E. Medications (MEE section for data entry begins here.)

This section asks the participant about medications they are currently taking. For the purpose of this question, “currently” refers to the past two weeks. Begin this section with the following transition statement, gently stressing the time frame, as “the past two weeks”.

“Now I would like to ask about the prescription medications you currently use. By that I mean in the past two weeks. Can I ask you to bring all the prescription medications you are currently taking to the telephone?”

Q23 (Interviewer: Do not ask) Does the participant have medications to report?
If the participant does not have any medications to report (NO) or refused to answer (PARTICIPANT REFUSE) then go to Q44.

Q24-43 Please read the names of all the medications prescribed by a doctor. This includes pills, liquid medications, skin patches, inhalers, and injections. Please do not include over the counter medications unless prescribed by a doctor. (If asked, repeat gently that currently taking applies to medications taken in the past two weeks.)

Begin by typing the medication name in the space provided. The table will pull up possible answers for you fill in the name. Select (by highlighting and pressing <enter>) the correct name from the list provided. The “Code” field will be filled once the medication name is selected with a medication code number up to 10 characters long. You will not be able to edit this field. If your medication is not in the look-up table, press <ESC> and you will return to the empty field where you may type the medication name in the name field, but no code
will be allowed. Ignore any dosage or frequency information listed in the medication lookup table. If you enter a medication and/or code incorrectly, you may delete the medication name and then record a ‘blank’ entry from the look up table. If there is no code corresponding to a medication, use the ‘blank’ entry to leave the code field empty.

Collect and record the strength of the medication as well as the units. If the participant does not know the strength or units, leave this blank.

After the participant has reported all their current medications, GO to Question 44.

**Q44** Are you NOW taking aspirin, or a medicine containing aspirin, on a regular basis? This does NOT include Tylenol or Advil or Motrin, ibuprofen.

44a. What dose do you take?

Close this section by saying:
*Thank you so much for answering these questions. We greatly appreciate your participation in the SOL study. Now, I’d just like to make sure our records are up to date.*

**Section F  Place of Birth**

This section was removed from the annual follow-up year four form. The numbering for subsequent sections was kept the same to mirror the AFU-Y3 form. Do not be alarmed that Q45-48 are skipped on the year four form. Continue with section G-question 49.

**Section G  Participant Tracking** (CIE section for data entry begins here.)

Begin this section by gently stating the following:

“Thank you so much for answering these questions. We greatly appreciate your participation in the SOL study. Now, I’d just like to make sure our records are up to date.

Current tracking information from SOL database will be displayed on the screen. Read the following statement before confirming contact information:

**English**

“It is very important for this study to be able to reach you in the future. Although you provided your contact information at the time of your visit, in order to keep our records up to date please provide us with your current home address. All information you give us is strictly confidential and will not be shared with anyone else”.

**Spanish:**

“Es sumamente importante para este estudio que en el futuro podamos comunicarnos con usted. Entendemos que usted dio su información de contacto en su visita al centro, pero para mantener nuestros archivos al día necesitamos confirmar su información actual. Toda información que usted nos provea se mantendrá en estricta confidencialidad y no será compartida con ninguna otra persona o entidad.”

**Q49 – 49.J.1** Current home address

Confirm participant’s current home address, updating the information as necessary.
Q50 Primary Phone Number
Confirm participant’s primary phone number, updating the information as necessary.

Q51 What is the best time of day to reach you at this number?
Confirm and/or record the best time of day to reach the participant at this number.

Q52 Secondary phone number
Confirm and/or collect and record the participant’s secondary phone number.

Q53 What is the best time of day to reach you at this number?
Confirm and/or record the best time of day to reach the participant at this number.

Q54.a – 54.e Local contact1 name (primary contact)
Confirm and/or collect and record the name of a local contact person.

Q55 Relationship
Relationship of contact person has with the participant.

Q56-56.J.1 Current home address of primary contact (local contact 1)
Confirm and/or collect and record the address of this local primary contact person.

Q57 Telephone (local contact 1)
Confirm and/or collect and record the telephone number of the local primary contact person.

Q58 – 58.e Local contact 2 name (secondary contact)
Confirm and/or collect and record the name of a secondary local contact person.

Q59 Relationship
Relationship of contact person has with the participant.

Q60 – 60.J.1 Current home address of secondary contact (local contact 2)
Confirm and/or collect and record the address of this local secondary contact person.

Q61 Telephone: (local contact 2)
Confirm and/or collect and record the telephone number of the local secondary contact person.

Q62 – 62.e Local contact 3 name
Confirm and/or collect and record the name of an additional local contact person.

Q63 Relationship
Relationship of contact person has with the participant.

Q64 – 64.J.1 Current home address of secondary contact (local contact 3)
Confirm and/or collect and record the address of this additional local contact person.

Q65 Telephone (local contact 3)
Confirm and/or collect and record the telephone number of the local secondary contact person.
Q66-66.e For this portion of the call, I have one more question. What is the name of your physician or other health care provider (HCP)?”

Collect and record the name and address of the participant’s personal physician or other health care provider, making sure to include city and state.

Section H. END OF THIS PORTION OF THE ANNUAL FOLLOW-UP CALL

“Thank you for answering the questions about your health. We wish to continue to stay in touch with you and will be contacting you again next year”