Overview:

This document will describe the process by which recruitment scripts are selected given participants' eligibility for the various imaging ancillary studies. This document does not apply to recruitment or recruitment scripts for other ancillary studies beyond ARIC-PET, ARIC Sleep-PET, or the Wasserman MRI ancillary study. ARIC-PET takes place at Washington County, Forsyth County, and Jackson, ARIC Sleep-PET at Washington County only, and the MRI study is at all four ARIC sites. Therefore, there are 3 potential imaging studies for Washington County, 2 for Forsyth and Jackson, and 1 for Minnesota.

There are 6 different recruitment scripts, depending on which of the 3 imaging studies participants are eligible for. It is important to note that a participant may be eligible for 2 or 3 studies, but depending on which part he/ she agrees to, they may not end up being included in all studies. The purpose of these different scripts is to allow one single script, and one single consent form, regardless of whether the participant is agreeing to 1, 2 or 3 studies.

As of 4/1/2017, unless otherwise specified, participants eligible only for Sleep and MRI will not be approached for inclusion in the Sleep study, but will only be approached for the MRI study.

Based on the DMS V6/V7 ancillary studies report (shown below), staff will be able to determine, therefore, which recruitment script should be used. The report can be run by selecting the boxes for PET, Sleep, and Vascular MRI. Attention should be paid to the columns labeled: MRI, Sleep, and PET. If "Eligible:No" is listed OR if nothing is listed (or if N/A is listed), the participant should be considered ineligible for that particular study. Recruitment scripts are selected based on the table below the screen shot from the report. For example, in the report screen shot below, (left-hand side with identifying information removed for this manual), the third listed participant (red box) will be contacted with Script F. *Please note: there is no specific script for participants only eligible for MRI and Sleep- these participants will be given the same script as participants only eligible for MRI (Script F).* For the fourth and seventh listed participant as shown (yellow box), Script A will be used. The blue box is used to give an example of someone in whom Script E should be used.

| | Reports: V6V7 Ancillary Report | | | | | | | | |
|-----------------|--------------------------------|-----------------|-----|------------------|------------------|------------------|------------------|---------------|--|
| V6 appt Date | V6 Date | V5 MRI Date | PWV | MRI | Sleep | PET | eyeDOC | ICT Status | |
| Jan 18, 2017 | Jan 18, 2017 | | | Eligible: No | Eligible: No | | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: No | | Eligible: Yes | 2 | |
| | | May 17, 2012 | | Eligible: Yes | Eligible: Yes | | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: Yes | | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: No | | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: No | | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: Yes | | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: No | | Eligible: Yes | 2 | |
| | | Oct 23, 2013 | | Eligible: Yes | Eligible: No | Eligible: Yes | Eligible: Yes | 2 | |
| | | | | Eligible: No | Eligible: No | | Eligible: Yes | 2 | |
| | | | | Eligible: | Eligible: | | Eligible: | 2 | |

| | MRI | Sleep | PET |
|----------|-----|-------|-----|
| Script A | no | yes | no |
| Script B | No | yes | yes |
| Script C | yes | yes | yes |
| Script D | No | no | yes |
| Script E | Yes | no | yes |
| Script F | yes | no | no |
| Script F | yes | (yes) | no |

Once the appropriate script based on eligibility is selected, the specific QXQ for that script should be used.

ARIC imaging studies script B (WASHINGTON ONLY):

| | Sleep-PET | ARIC-PET | MRI Wasserman |
|----------|-----------|----------|---------------|
| Script A | yes | no | no |
| Script B | yes | yes | No |
| Script C | yes | yes | yes |
| Script D | no | yes | No |
| Script E | no | yes | Yes |
| Script F | no | no | yes |

Script section 1:

Hello, Mr./Mrs._____, this is _____ from the ARIC Study at Johns Hopkins.

First, I would like to thank you again for your involvement in the ARIC study and for your most recent visit to the clinic.

I am calling because there is another study that we would like to discuss with you. Is this a good time to discuss this additional study?

(If no, ask for another good time to call back; If yes, proceed with script)

(If yes:)

We will be collecting information about you during this phone call. Your taking part in this phone call is completely voluntary.

Your information collected on this call will only be seen by researchers at Johns Hopkins. We try to make sure that the information we collect from you is kept private and used only for the research study we are discussing. If you do not agree to continue the phone call, it will not affect your care at any of your local hospitals or at Johns Hopkins.

We are contacting people who are part of the ARIC study, and were also part of the Sleep Heart Health Study a number of years ago, and who were part of the ARIC-PET study a few years ago. We are working on a research study which has two parts, which will help us learn more about how risk factors for vascular disease, sleep, and problems with sleep might be associated with memory problems and risk for Alzheimer's disease.

We are asking people who were in the ARIC-PET study before to participate in the part of the study evaluating how risk factors for vascular disease might be associated with changes in your brain or blood vessels; as part of this study we'd like you to complete a repeat brain MRI and brain PET scan. In addition, we are asking approximately 200 people from the Washington County ARIC site who were in ARIC and in the Sleep Heart Health Study if they will get a sleep study, in your home, similar to the one you had a number of years ago in the Sleep Heart Health study, to evaluate how you are sleeping. We will also ask you some questions about your sleep and may ask you to fill out a sleep diary. We're asking ARIC participants to have this scan to help us understand more about how sleep patterns and sleep disturbances might be associated with memory problems. May I tell you more about this?

(if no, record response on ancillary study contact form, and read closing script A)

Closing Script A:

Thank you for your time, and we hope you will continue to participate in ARIC studies in the future. We will continue to keep your information private to the extent possible by applicable law. (also ask if contact on another day would be preferable, or determine reasons for refusal).

(if yes,:)

As part of this study, there are two short imaging visits and a sleep study at your house, all scheduled on days convenient for you. I would like to tell you about each part of the study separately, and ask you questions to make sure you are eligible for each part.

First, I would like to describe the brain PET scan. This is the same kind of PET scan as you had before in ARIC-PET. A PET scan is a special kind of CT scan that uses a special radioactive injection, and then takes pictures of it in the brain to see if there is buildup of the protein that we think might cause Alzheimer's disease, just like you had before in the ARIC-PET study. If you are willing to participate in the study, we would ask you to meet us at the same PET imaging facility where you went for the prior study, where (I/ a member of our staff) would tell you about the study again, and you would undergo the PET scan. The staff at the imaging facility would put an IV in a vein in your arm, and then take special pictures. The procedure would take about an hour, with less than half of that time taking the pictures.

There are a few risks associated with having the PET scan, and we'd like you to know about them before you decide whether or not you want to participate. For instance, you will be exposed to radiation—it is a little more radiation than if you had a CT scan of your head. The injection, which is called Florbetapir F18, was approved by the Food and Drug Administration. It is used at very small doses, and has been used in thousands of people in ongoing studies with minimal side effects. Some of these side effects have included shoulder pain, nausea and anxiety, as well as headache in a small proportion of participants. None of these were deemed to be medically significant to the doctors involved in the studies done with Florbetapir.

You will be compensated \$75 for your involvement in the PET scan part of the study.

(complete PRE form, including scheduling date/ time of appointment if they agree)

(If there are PRE PET exclusions or refusals, read the following): Even though you will not get the PET scan as part of the study, we would still value your involvement in other parts of this study.

(then skip to Script section 2, below, for people with PET exclusions or refusals only)

(IF no PRE form exclusions and no refusals, read the following script:)

As another part of the study, we would like you to get a brain MRI scan, which is a kind of brain imaging that uses magnets to take pictures of your brain. You would need to lie still on your back for about a half hour. Our staff would meet you at the facility for the MRI scan, which is the same place where you had a brain MRI scan before. The whole visit would take between one and a half and two hours. There are some risks associated with the brain MRI scan. If you have metal in your body, the magnets used for the MRI scan cause problems with that metal; some of the questions we asked you earlier in this call were to make sure you don't have any metal that would be problematic. Other people

report that the MRI scan makes them claustrophobic. You will be compensated \$75 for your involvement in the MRI part of the study.

(complete MRE form, including scheduling date/ time of appointment if they agree, then continue:)

(if participant does not meet all MRE incusion criteria, or does not agree to participate, add the following): There are other parts of the study that we would like to talk to you about now. (now go on to section 2, below)

(if participant does meet MRE inclusion criteria and agrees to participate, read script section 2)

Script section 2:

As part of this study, we would like to schedule you for a sleep study, which can be done at your convenience in your home or in a hotel if you would prefer that. Our staff will come to your home about an hour and a half before your usual bedtime, and connect the sleep study equipment, which will be very similar to what you wore when you had sleep studies as part of the Sleep Heart Health Study, many years ago. They would apply several electrodes (sensors) using sticky tape or paste to your scalp, face, chest, legs, and stomach that will monitor your sleep and breathing patterns. You would wear a nasal cannula (a flexible plastic tube with two prongs at the end) and a thermistor (thin wires with two small wire prongs) under your nose. You would also wear a sticky clip on your finger to measure your oxygen levels and heart activity, and two devices, called actigraphs, on your wrist. Actigraphs look like wristwatches and record movement.

The main risk associated with having a sleep study done in your house is that this may disrupt your usual nighttime routine by having to be hooked up for the sleep study.

The next parts of the study are optional. This means that you can still be in the study without agreeing to wear the devices I will describe in a moment. Remember that a moment ago, I mentioned that you would wear two actigraphs during the sleep study. They're similar to wristwatches, but they measure movement. In the optional part of the study, you would also wear these two devices outside of the sleep study.

One of the devices is called a Fitbit Charge HR which is for longer-term activity monitoring. The Fitbit provides detailed information on the number of steps you have taken and measures your heart rate. You will be given instructions on how to charge the device every five days, or as needed, and to sync the device daily with your smartphone or your computer. You will be asked to wear the Fitbit for a period of 6 months. You would leave the Fitbit on all the time, except when you are bathing or swimming.

The other device is called Actigraph GT9X which is used for short-term monitoring (seven days and nights). There will be up to three different times during this study when you will be asked to wear the Actigraph. We will give it to you at the time of your sleep study. After that you will be asked to begin wearing the Actigraph for seven (7) days and nights and to mail it back after. The Actigraph is designed to be worn at all times during each of the seven day periods and removed only for bathing or swimming. You would be asked to complete a sleep diary, providing information about when you went to bed and got up for the day, when you napped and if you removed the device. When we contact you about a repeat MRI and PET scan, like you did through the separate ARIC-PET study,

we may ask you to wear the Actigraph again for another one or two 7-day periods. Each time you will mail it back to us after wearing it for a week.

If you agree to participate, we will go over all of this information with you again in person and give you an opportunity to ask any questions that you may have. We will send you a copy of a consent form that you can look over at home before we review it in person with you. This form will provide you with even more details about the sleep study. We will ask you to sign a consent form before participating in the study. A few weeks after the study we will let you know if there were any abnormalities as part of your sleep study. If we find anything more urgent as part of your sleep study, we will let you know right away.

There is no benefit to you as a participant in this study, however your participation may help others in the future.

There is no cost to you for participating.

You will be compensated an additional \$50 for involvement in the sleep part of the study. Also, if you participate in the optional part of the study, you will receive \$20.00 for wearing the Actigraph, and if you complete the optional part of the study that uses the Fitbit, you will be able to keep the Fitbit when the study is over.

(Complete SRE form, including scheduling)

(If agreed to PET, MRI, and Sleep Study, read Closing Script B:) Closing Script B: Thank you.

We will send you a letter to confirm your involvement with details about the time of our visit; we will need to come to your house to get you set up for your sleep study several hours before your regular bedtime, and you will need to stay home for the evening after our visit. We will also send you a copy of the consent form that you should review (but don't sign) before your visit. We will need you to sign another one for the whole study when we see you for the sleep study. We will continue to keep your information private to the extent possible by applicable law.

We will also send you a letter to confirm your involvement in the MRI and PET scans and to send you directions to the imaging facilities where the MRI and PET scans will take place. We will also send you a copy of the consent form that you should review (but don't sign) before your visit. We will need you to sign another one for the whole study when you come to the MRI facility. We will continue to keep your information private to the extent possible by applicable law.

(If agreed only to PET and MRI, or only PET, read closing script C:) Closing Script C: Thank you.

We will send you a letter to confirm your involvement in the study and to send you directions of where your appointment(s) will be. We will also send you a copy of the consent form that you should review (but don't sign) before your visit. We will need you

to sign another one for the whole study when you come to the imaging facility. We will continue to keep your information private to the extent possible by applicable law.

(if refused PET, and agreed to Sleep study:) Thank you.

We will send you a letter to confirm your involvement with details about the time of our visit; we will need to come to your house to get you set up for your sleep study several hours before your regular bedtime, and you will need to stay home for the evening after our visit. We will also send you a copy of the consent form that you should review (but don't sign) before your visit. We will need you to sign another one for the whole study when we see you for the sleep study. We will continue to keep your information private to the extent possible by applicable law.

(if refused PET and sleep study, read closing script D:) Closing Script D:

Thank you for your time, and we hope you will continue to participate in ARIC studies in the future. We will continue to keep your information private to the extent possible by applicable law.