

Ambulatory Blood Pressure Monitor Protocol Instruction Script

INSTRUCTIONS FOR THE 26-HOUR BLOOD PRESSURE MONITORING

Performed after home monitoring assessment.

We will now talk about ambulatory blood pressure monitoring.

We will begin by setting up the ABPM monitor, going over the instructions, and explaining the Participant Log and Experience Form.

The monitor will automatically take your blood pressure every 20 minutes during the day from 5:00 am to 1:00 am and every 30 minutes from 1:00 am to 5:00 am. (Note – you may want to tuck the monitor under your pillow at night to avoid sleep disturbance and prevent the monitor from falling off the bed).

The ABPM cuff will be positioned on your bare upper arm during this visit. It will be placed on the same arm you used for your ARIC seated blood pressure measurement, just above your elbow. It is okay to wear a sweater or long-sleeve shirt over the cuff, as long as it remains on your bare skin throughout the 26-hour monitoring period.

The tubing of the cuff will run up your arm, around your back, so it is out of the way as you go about your day-to-day activities. The tube will be securely connected to the ABPM device and we will provide the Velcro holster that you can attach to your belt or put in your pocket, so you are able to walk around wearing the device. You may put the ABPM device down next to you on the couch or table when you are seated. You may also put the device on the bed next to you while you are sleeping.

If the cuff slips down or you need to re-position it, wrap the cuff tight enough around your arm so that your pointer and middle finger can slide underneath the cuff (this is the "2-finger rule"). This will ensure that the cuff isn't too loose, but isn't too tight on your arm, and will ensure accurate blood pressure readings.

Refer to the "ABPM Participant Checklist and Replacing the Cuff" instructions for further information

The action button on the ABPM device will be pressed once to start taking your blood pressure measurement. When you feel the cuff begin to inflate (point to the cuff to show the participant what you are talking about), you should relax your arm and hold it still. **Do not change your body position.** At this time, the monitor is taking a 'reading' of your blood pressure. After the initial measurement, the result will be displayed on the device for some seconds and disappear. We will have to wait for about 0 minute to 20 minutes to observe one spontaneous measurement to confirm the device is programmed correctly before you can go home. All other results will not be displayed on the device.

It is important that we get all the blood pressure readings during the 26-hour period. You may remove the cuff from your arm to bathe or change clothes in-between blood pressure readings. Please place the cuff back on your arm before the next reading; after wearing the cuff all day you will be familiar with when it will take the readings. <u>Wearing the monitor is optional</u> while driving. Please observe how the cuff is applied **before you remove it**, so that you will know how to put it back on correctly.

Take a moment to demonstrate with the participant placing the cuff back on their arm. Have the patient try placing the cuff on themselves. Refer to the "ABPM Participant Checklist and Replacing the Cuff" instructions to facilitate.

Inflating a second time:

Occasionally the cuff may re-inflate 2 minutes after the prior attempt – this happens when the cuff cannot obtain a reading the first time. The most common causes are arm movement or the cuff slipping out of position. Do not be alarmed. Check the position of the cuff and keep your arm as still as possible. The device will try again.

Do not get the monitor wet, but if it does get wet, you are in no danger of being electrically shocked. Do not turn the monitor off for any reason unless you are instructed to by the ARIC Study Coordinator.

Ending your blood pressure monitoring:

2 hours before the anticipated end time of your blood pressure monitoring, a staff will contact you about the specific time you are completing the monitoring and also inquire about the mode of return for the ABPM device in addition to reminding you about completing the Participant Log and Experience form. At the end of the 26 hours at time = __: __ a.m. / p.m. (use participants actual time) please do a manual reading as described below:

Before removing the monitor, push the circle action button on the Velcro pouch **until a tone is heard.** If you do not push the button until a tone is heard, it will not take the blood pressure. There is a delay of a few seconds after the tone is heard before the blood pressure is actually taken. After the monitor takes the reading wait to make sure the cuff deflates before removing the cuff. It will inflate again in 2 minutes if the blood pressure was not taken successfully.

After the measurement is complete, take the monitor out of its case and remove the batteries or it will keep going off in the mail! The batteries are simple to remove.

At this time, show the participant where they are on the back of the device with a string attached to one of the batteries to facilitate easy removal.

Record the time you completed the assessment on the Participant Log. Please answer the few brief questions on the Log. The Log is structured to record events at 3-hour interval. You will need to document the time you slept and the time you woke up. In addition, you will document whether you had a meal, engaged in any physical activities, had symptoms such as lightheadedness or headache, had any stressful events or drove during the 26-hour period. If there is no event during these time periods, you will need to check 'Nothing to report' on the Log. You have the chance to check multiple events within a specific time period.

Take a moment to orient the participant to the ABPM log.

You will need to record your experience after wearing the device on an ABPM Experience Form which will be made available to you and returned in addition to the ambulatory blood pressure monitor and ARIC ABPM Introduction Script 09/01/2021 Page 2 of 3

the Participant Log. This form will compare your experience of wearing the device compared to a typical day, rating whether you had more or less of events such as stress, pain, time sleeping, physical activity, feeling light-headed, feeling sick, or prescribed medication.

Take a moment to review the experience form with the participant.

At this point, make sure the ABPM cuff is positioned appropriately and initialize the device by pushing the action button (will be located under the circle on the Velcro pouch). Document these readings on the ABP form (this will need to be done quickly).

After the assessment wait for at least 1 spontaneous measurement before sending the participant home.

Fill out the remaining administrative questions on the ABP initialization form.

While waiting for a spontaneous measurement, explain the return instructions by adapting the text below.

Adapt the following instructions below according to what method of returning works best for your field center or based on participant's preference:

Drop the package off at your nearest FedEx location OR return in person to the ARIC Field Center OR a staff from the ARIC Field Center will come to your home to pick it up.

Let the participant know you will be calling them tomorrow. Confirm a good time for the check in call that is within 2-hours of the end of the ABPM assessment. Make sure the start and end times are clearly documented on the log and experience forms. Ask the participant if they have any further questions. Review that the key information for the ABPM initialization form has been filled out.