



(Affix Label Here)

Participant ID: _____

Participant Name Code: _____

Date Form Filled Out:

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(e.g., 10JUN2005)

Interviewer Code: □ □ □

Circle Field Center Location:

BU CU DK UP

Performance Measures

Examiner: Where is this test being performed?

- 1This Form was Administered by Study Personnel in the Clinic
- 2This Form was Administered by Study Personnel in the Home
- 3Other (Please Specify) _____

A. SHORT PHYSICAL PERFORMANCE BATTERY (SPPB)

Interviewer: *All of the tests should be performed in the same order as they are presented in this protocol. Instructions to the participant are shown in bold italic and should be given exactly as they are written in this script.*

Now let's begin the evaluation. I would now like you to try to move your body in different movements. I will first describe and show each movement to you. Then I'd like you to try to do it. If you cannot do a particular movement, or if you feel it would be unsafe to try to do it, tell me and we'll move on to the next one. Let me emphasize that I do not want you to try to do any movement that you feel might be unsafe.

Do you have any questions before we begin?

Measure: Balance Tests

Interviewer: *The participant must be able to stand unassisted without the use of a cane or walker. You may help the participant to get up.*

Side-by-Side Stand

Interviewer Script: *Now I will show you the first movement. (Demonstrate) I want you to try to stand with your feet together, side-by-side, for about 10 seconds. You may use your arms, bend your knees, or move your body to maintain your balance, but try not to move your feet. Try to hold this position until I tell you to stop.*

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Stand next to the participant to help him/her into the side-by-side position.

- *Supply just enough support to the participant's arm to prevent loss of balance.*
- *When the participant has his/her feet in position, ask "Are you ready?"*
- *Then let go and begin timing as you say, "Ready, begin."*
- *Stop the stopwatch and say "Stop" after 10 seconds or when the participant steps out of position or grabs your arm.*
- *If participant is unable to hold the position for 10 seconds, record result and go to the gait speed test.*

1. Is the participant able to do a side-by-side stand (balance unaided) for 10 seconds?

¹Yes, held for 10 seconds

⁰No, not held for 10 seconds

**Record Result in Q2; End Balance Test;
Go to Gait Speed Test**

^RNot attempted/Refused

End Balance Test/Go to Q3

2. Number of seconds held, if less than 10: ____ . ____ ____

3. If participant did not attempt test, indicate reason with an "X". **End Balance Test; Go to Gait Speed Test**

¹Tried, but unable

²Participant could not hold position unassisted

³Not attempted, interviewer felt unsafe

⁴Not attempted, participant felt unsafe

⁵Participant unable to understand instructions

⁶Other (Please Specify) _____

^RParticipant Refused

Semi-Tandem Stand

Interviewer Script: *Now I will show you the second movement. (Demonstrate) I want you to try to stand with the side of the heel of one foot touching the big toe of the other foot for about 10 seconds. You may put either foot in front, whichever is more comfortable for you. You may use your arms, bend your knees, or move your body to maintain your balance, but try not to move your feet. Try to hold this position until I tell you to stop.*

- *Stand next to the participant to help him/her into the semi-tandem position.*
- *Supply just enough support to the participant's arm to prevent loss of balance.*
- *When the participant has his/her feet in position, ask "Are you ready?"*
- *Then let go and begin timing as you say, "Ready, begin."*
- *Stop the stopwatch and say "Stop" after 10 seconds or when the participant steps out of position or grabs your arm.*
- *If participant is unable to hold the position for 10 seconds, record result and go to the gait speed test.*

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4. Is the participant able to do a semi-tandem stand (balance unaided) for 10 seconds?

¹ Yes, held for 10 seconds

⁰ No, not held for 10 seconds

**Record Result in Q5; End Balance Test;
Go to Gait Speed Test**

^R Not attempted/Refused

End Balance Test; Go to Q6

5. Number of seconds held, if less than 10: ____ . ____ ____

Go to Gait Speed Test

6. If participant did not attempt test, indicate reason with an "X".

End Balance Test; Go to Gait Speed Test

¹ Tried, but unable

² Participant could not hold position unassisted

³ Not attempted, interviewer felt unsafe

⁴ Not attempted, participant felt unsafe

⁵ Participant unable to understand instructions

⁶ Other (Please Specify) _____

^R Participant Refused

Tandem Stand

Interviewer Script: *Now I will show you the third movement. (Demonstrate) I want you to try to stand with the heel of one foot in front of and touching the toes of the other foot for about 10 seconds. You may put either foot in front, whichever is more comfortable for you. You may use your arms, bend your knees, or move your body to maintain your balance, but try not to move your feet. Try to hold this position until I tell you to stop.*

- Stand next to the participant to help him/her into the tandem position.
- Supply just enough support to the participant's arm to prevent loss of balance.
- When the participant has his/her feet in position, ask "Are you ready?"
- Then let go and begin timing as you say, "Ready, begin."
- Stop the stopwatch and say "Stop" after 10 seconds or when the participant steps out of position or grabs your arm.
- If participant is unable to hold the position for 10 seconds, record result and go to the gait speed test.

7. Is the participant able to do a tandem stand (balance unaided) for 10 seconds?

¹ Yes, held for 10 seconds

⁰ No, not held for 10 seconds

**Record Result in Q8; End Balance Test;
Go to Gait Speed Test**

^R Not attempted/Refused

End Balance Test; Go to Q9

8. Number of seconds held, if less than 10: ____ . ____ ____

Go to Gait Speed Test

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9. If participant did not attempt test, indicate reason with an "X". **End Balance Test; Go to Gait Speed Test**

- 1Tried, but unable
- 2Participant could not hold position unassisted
- 3Not attempted, interviewer felt unsafe
- 4Not attempted, participant felt unsafe
- 5Participant unable to understand instructions
- 6Other (Please Specify)_____
- RParticipant Refused

Measure: Gait Speed Test

First Gait Speed

Interviewer Script: *Now I am going to observe how you normally walk. If you use a cane or other walking aid and you feel you need it to walk a short distance, then you may use it.*

This is our walking course. I want you to walk to the other end of the course at your usual speed, just as if you were walking down the street to go to the store. (Demonstrate the walk for the participant.)

Walk all the way past the other end of the tape before you stop. I will walk with you. Do you feel this would be safe? (Have the participant stand with both feet touching the starting line.)

When I want you to start, I will say: "Ready, begin." When the participant acknowledges this instruction say "Ready, begin."

- *Press the start/stop button to start the stopwatch when the participant steps over the starting line.*
- *Walk behind and to the side of the participant.*
- *Stop timing when one of the participant's feet is completely across the end line.*

10. Length of walk test course:

- 14 Meters
- 23 Meters (if 4 meter course is unavailable)

11. Time for 3 or 4 meters: ____ ____ . ____ ____ Seconds

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12. If participant did not attempt test, indicate reason with an "X":

- 1Tried, but unable
- 2Participant could not walk unassisted
- 3Not attempted, interviewer felt unsafe
- 4Not attempted, participant felt unsafe
- 5Participant unable to understand instructions
- 6Other (Please Specify)_____
- RParticipant Refused

13. Aids used for first walk:

- 0None
- 1Cane
- 2Other (Please Specify)_____

Second Gait Speed

Interviewer Script: *Now I want you to repeat the walk. Remember to walk at your usual pace, and go all the way past the other end of the course.*

Have the participant stand with both feet touching the starting line.

When I want you to start, I will say: "Ready, begin." When the participant acknowledges this instruction say "Ready, begin."

- *Press the start/stop button to start the stopwatch when the participant steps over the starting line.*
- *Walk behind and to the side of the participant.*
- *Stop timing when one of the participant's feet is completely across the end line.*

14. Time for 3 or 4 meters: ____ ____ . ____ ____ Seconds

15. If participant did not attempt test, indicate reason with an "X":

- 1Tried, but unable
- 2Participant could not walk unassisted
- 3Not attempted, interviewer felt unsafe
- 4Not attempted, participant felt unsafe
- 5Participant unable to understand instructions
- 6Other (Please Specify)_____
- RParticipant Refused

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16. Aids used for Second walk:

- ⁰None
- ¹Cane
- ²Other (Please Specify) _____

17. What is the time for the faster of the two walks? (**Record the shorter of the two times; if only one walk done, record that time**) ____ ____ . ____ ____

Measure: Chair Stand Test

Single Chair Stand

Interviewer Script: *Let's do the last movement test. Do you think it would be safe for you to try to stand up from a chair?*

The next test measures the strength in your legs. (Demonstrate and explain the procedure.)

First, fold your arms across your chest and sit so that your feet are on the floor; then stand up keeping your arms folded across your chest.

Please stand up keeping your arms folded across your chest. (Record result)

If the participant cannot rise without using arms, say "Okay, try to stand up using your arms." This is the end of the test. Record result onto the scoring page.

18. Safe to stand without help?

- ¹Yes
- ⁰No

19. Results:

- ¹Participant stood without using arms **Go to Repeated Chair Stand Test**
- ²Participant used arms to stand **End Test; Proceed to Section B**
- ⁰Test not completed (0 points) **End Test; Go to Q20**

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20. If participant did not attempt test, indicate reason with an "X":

- 1Tried, but unable
- 2Participant could not stand unassisted
- 3Not attempted, interviewer felt unsafe
- 4Not attempted, participant felt unsafe
- 5Participant unable to understand instructions
- 6Other (Please Specify) _____
- RParticipant Refused

Interviewer: Skip to Q24

Repeated Chair Stand

Interviewer Script: *Do you think it would be safe for you to try to stand up from a chair five times without using your arms? (Demonstrate and explain the procedure.)*

*Please stand up straight as **QUICKLY** as you can five times, without stopping in between. After standing up each time, sit down and then stand up again. Keep your arms folded across your chest. I'll be timing you with a stopwatch.*

- When the participant is properly seated, say: "**Ready? Stand.**" and begin timing.
- Count out loud as the participant rises each time, up to five times.
- Stop if participant becomes tired or short of breath during repeated chair stands.
- Stop the stopwatch when he/she has straightened up completely for the fifth time.
- Also stop:
 - If participant uses his/her arms.
 - After 1 minute, if participant has not completed all 5 rises
 - At your discretion, if concerned for participant's safety.

*If the participant stops and appears to be fatigued before completing the five stands, confirm this by asking "**Can you continue?**"*

21. Safe to stand five times?

- 1Yes
- 0No

Go to Q23

22. Time to complete five stands? (**Only if participant completes 5 stands**)

____ . ____ Seconds

23. If participant did not attempt/complete test, indicate reason with an "X":

- 1Tried, but unable
- 2Participant could not stand unassisted
- 3Not attempted, interviewer felt unsafe
- 4Not attempted, participant felt unsafe
- 5Participant unable to understand instructions
- 6Other (Please Specify) _____
- RParticipant Refused

B. GRIP STRENGTH

Interviewer Script: *In this exercise, I am going to use this instrument to measure the strength in your hand. I am going to ask you some questions to determine which hand would be better to test.*

24. Are you right or left-handed?

- 1Right
- 2Left
- 3Both

25. Which is your stronger hand?

- 1Right
- 2Left
- 3Same

Determine safety for right hand; Go to Q26a
Determine safety for left hand; Go to Q27a
Determine safety for dominant hand (See Q24; Proceed to Q26a for right or Q27a for left). If neither hand is dominant, determine safety for right hand, Go to Q26a.

If determining safety for right hand:

26a. Do you have severe pain or severe arthritis in your **right hand**?

- 1Yes
- 0No

26b. Have you had any surgery on your **right hand** or wrist in the past three months?

- 1Yes
- 0No

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26c. Do you think you could safely squeeze this with your **right hand**, as hard as you can?

- ¹Yes
⁰No

Test right hand; Go to Q28

Do not test right hand, Go to Q27a to evaluate left hand

If determining safety for left hand:

27a. Do you have severe pain or severe arthritis in your **left hand**?

- ¹Yes
⁰No

27b. Have you had any surgery on your **left hand** or wrist in the past three months?

- ¹Yes
⁰No

Do not test left hand, Go to Q26a to evaluate right hand, if not already done. If right hand not eligible, Go to Q28.

27c. Do you think you could safely squeeze this with your **left hand**, as hard as you can?

- ¹Yes
⁰No

Test left hand; Go to Q28

Do not test left hand, Go to Q26a to evaluate right hand, if not already done. If right hand not eligible, Go to Q28.

28. Which hand was tested?

- ¹Right
²Left
³Neither

END TEST

Interviewer Script: *I'd like you to sit down and take your right/left arm and please place it next to your body and bend your elbow at a 90° angle. Grip the two bars in your hand, like this. You need to slowly squeeze the bars as hard as you can."* (Hand the Dynamometer to the participant. Adjust if needed.)

Now try it once just to get the feel for it. For this practice, just squeeze gently. It won't feel like the bars are moving, but your strength will be recorded. Are the bars the right distance apart for a comfortable grip?

Show dial to participant.

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29. Dynamometer Setting:

- 1One
- 2Two
- 3Three
- 4Four
- 5Five

We'll do this twice. This time it counts, so when I say "Squeeze", squeeze as hard as you can. Ready? Squeeze! Squeeze! Squeeze! Okay now, STOP.

30. Trial 1:

_____ kg

- UUnable to test/exclusion
- CParticipant unable to understand instructions
- RRefused

Examiner Note: Wait 10 seconds before second trial.

Now, one more time. Squeeze as hard as you can. Ready? Squeeze! Squeeze! Squeeze! Okay now, STOP.

31. Trial 2:

_____ kg

- UUnable to test/exclusion
 - CParticipant unable to understand instructions
 - RRefused
-