



Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

Study ID _____ Date _____ Tester Initials: _____

SHORT PHYSICAL PERFORMANCE BATTERY PROTOCOL AND SCORE SHEET

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

1. BALANCE TESTS

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

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 exercise that you feel might be unsafe.

Do you have any questions before we begin?

A. Side-by-Side Stand

1. Now I will show you the first movement.

2. (Demonstrate) I want you to try to stand with your feet together, side-by-side, for about 10 seconds.

3. 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.

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

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

B. Semi-Tandem Stand

1. ***Now I will show you the second movement.***
2. (Demonstrate) ***Now 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.***
3. ***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.***
4. Stand next to the participant to help him/her into the semi-tandem position.
5. Supply just enough support to the participant's arm to prevent loss of balance.
6. When the participant has his/her feet together, ask "***Are you ready?***"
7. Then let go and begin timing as you say, "***Ready, begin.***"
8. Stop the stopwatch and say "***Stop***" after 10 seconds or when the participant steps out of position or grabs your arm.
9. If participant is unable to hold the position for 10 seconds, record result and go to the gait speed test.

C. Tandem Stand

1. ***Now I will show you the third movement.***
2. (Demonstrate) ***Now 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.***
3. ***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.

4. Stand next to the participant to help him/her into the tandem position.
5. Supply just enough support to the participant's arm to prevent loss of balance.
6. When the participant has his/her feet together, ask "**Are you ready?**"
7. Then let go and begin timing as you say, "**Ready, begin.**"
8. Stop the stopwatch and say "**Stop**" after 10 seconds or when the participant steps out of position or grabs your arm.

<p>SCORING:</p> <p>A. Side-by-Side Stand</p> <p>1 <input type="checkbox"/> point Held for 10 sec</p> <p>0 <input type="checkbox"/> points Not held for 10 sec</p> <p>0 <input type="checkbox"/> points Not attempted</p> <p>If 0 points, end Balance Tests</p>	<p><i>If participant did not attempt test or failed, mark why:</i> <input type="checkbox"/> 1 Tried but unable <input type="checkbox"/> 2 Participant could not hold position unassisted <input type="checkbox"/> 3 Not attempted, you felt unsafe <input type="checkbox"/> 4 Not attempted, participant felt unsafe <input type="checkbox"/> 5 Participant unable to understand instructions <input type="checkbox"/> 6 Other (specify) _____ <input type="checkbox"/> 7 Participant refused</p>
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Number of seconds held if less than 10 sec: ____ . ____ sec

B. Semi-Tandem Stand

- 1 point Held for 10 sec
- 0 points Not held for 10 sec
- 0 points Not attempted (circle reason above)

If 0 points, end Balance Tests

Number of seconds held if less than 10 sec: ____ . ____ sec

C. Tandem Stand

- 2 points Held for 10 sec
- 1 point Not held for 3 to 9.99 sec
- 0 points Held for < than 3 sec
- 0 points Not attempted (*circle reason above*)

Number of seconds held if less than 10 sec: ____ . ____ sec

D. Total Balance Tests score _____ (sum points)

Comments:

2. GAIT SPEED TEST

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.

A. First Gait Speed Test

1. *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.*

2. Demonstrate the walk for the participant.

3. *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?*

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

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

6. Press the start/stop button to start the stopwatch as the participant begins walking.

7. Walk behind and to the side of the participant.

8. Stop timing when one of the participant's feet is completely across the end line.

B. Second Gait Speed Test

1. *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.*

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

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

4. Press the start/stop button to start the stopwatch as the participant begins walking.

5. Walk behind and to the side of the participant.
6. Stop timing when one of the participant's feet is completely across the end line.

GAIT SPEED TEST SCORING:

Length of walk test course: Four meters Three meters

A. Time for First Gait Speed Test (sec)

1. Time for 3 or 4 meters __ __. __ __ sec
2. If participant did not attempt test or failed, mark why:
 - 1 Tried but unable
 - 2 Participant could not walk unassisted
 - 3 Not attempted, you felt unsafe
 - 4 Not attempted, participant felt unsafe
 - 5 Participant unable to understand instructions
 - 6 Other (Specify)_____
 - 7 Participant refused

Complete score sheet and go to chair stand test

3. Aids for the first walk..... None Cane Other

Comments:

B. Time for Second Gait Speed Test (sec)

1. Time for 3 or 4 meters __ __. __ __ sec
2. If participant did not attempt test or failed, circle why:
 - 1 Tried but unable
 - 2 Participant could not walk unassisted
 - 3 Not attempted, you felt unsafe
 - 4 Not attempted, participant felt unsafe

5 Participant unable to understand instructions

6 Other (Specify) _____

7 Participant refused

3. Aids for the second walk..... None Cane Other

What is the time for the faster of the two walks?

Record the shorter of the two times __ __. __ __ sec

[If only 1 walk done, record that time] __ __. __ __ sec

If the participant was unable to do the walk: **0 points**

For 4-Meter Walk:

1 point If time is more than 8.70 sec

2 points If time is 6.21 to 8.70 sec

3 points If time is 4.82 to 6.20 sec

4 points If time is less than 4.82 sec

For 3-Meter Walk:

1 point If time is more than 6.52 sec

2 points If time is 4.66 to 6.52 sec

3 points If time is 3.62 to 4.65 sec

4 points If time is less than 3.62 sec

3. CHAIR STAND TEST

Single Chair Stand

1. *Let's do the last movement test. Do you think it would be safe for you to try to stand up from a chair without using your arms?*

2. *The next test measures the strength in your legs.*

3. (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.*

4. ***Please stand up keeping your arms folded across your chest.*** (Record results).

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

Repeated Chair Stands

1. ***Do you think it would be safe for you to try to stand up from a chair five times without using your arms?***

2. (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.***

3. When the participant is properly seated, say: "**Ready? Stand**" and begin timing.

4. Count out loud as the participant arises each time, up to five times.

5. Stop if participant becomes tired or short of breath during repeated chair stands.

6. Stop the stopwatch when he/she has straightened up completely for the fifth time.

7. Also stop:

- If participant uses his/her arms
- After 1 minute, if participant has not completed rises
- At your discretion, if concerned for participant's safety

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

9. If participant says "yes," continue timing. If participant says "No," stop and reset the stopwatch.

SCORING:

Single Chair Stand Test

A. Safe to stand without help

[] YES

NO

B. Results:

Participant stood without using arms

YES

NO → Go to Repeated Chair Stand Test

Participant used arms to stand

YES

NO → End test; score as 0 points

Test not completed

YES

NO → End test; score as 0 points

C. If participant did not attempt test or failed, mark why:

1 Tried but unable

2 Participant could not stand unassisted

3 Not attempted, you felt unsafe

4 Not attempted, participant felt unsafe

5 Participant unable to understand instructions

6 Other (Specify) _____

7 Participant refused

Repeated Chair Stand Test

A. Safe to stand five times

YES

NO

B. If five stands done successfully, record time in seconds.

Time to complete five stands __ __. __ __ sec

C. If participant did not attempt test or failed, circle why:

1 Tried but unable

2 Participant could not stand unassisted

3 Not attempted, you felt unsafe

4 Not attempted, participant felt unsafe

5 Participant unable to understand instructions

6 Other (Specify)_____

7 Participant refused

Scoring the Repeated Chair Test

0 points Participant unable to complete 5 chair stands or completes stands in >60 sec

1 point If chair stand time is 16.70 sec or more

2 points If chair stand time is 13.70 to 16.69 sec

3 points If chair stand time is 11.20 to 13.69 sec

4 points If chair stand time is 11.19 sec or less

Scoring for Complete Short Physical Performance Battery

Test Scores	_____ points
Gait Speed Test score	_____ points
Chair Stand Test score	_____ points
Total Score	_____ points
Test Scores	_____ points (sum of points above)

Protocol source: <https://www.phenxtoolkit.org/protocols/view/150501>