

	 		_					
Participant ID #:			Acrostic:					
·								
Technician ID:		Date:			/			
			Month	Day		Year		
						$\neg \Gamma$	\mathbf{T}	

Interviewer ID:

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 and should be given exactly as they are written in this script.

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?

Time at start of form administration:		: 🔲	O AM
	Hr	Min	

Section 1: Balance Tests

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.

Side-by-Side: 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. 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 together, 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.

A. Side-by-side-stand

O	Held 10 seconds (1 point) — Go to B. Semi-tandem stand
0	Held <10 seconds (0 points) ——— Go to Section 2: Gait speed test
0	Not attempted (0 points)

If participant could not complete or did not atter	npt	test, select the reason below:
O Tried but unable	0	Participant unable to understand instructions
O Could not hold position unassisted	0	Other, specify:
O Not attempted, you felt unsafe	0	Participant refused
O Not attempted, participant felt unsafe		
Go to Section 2, gait speed test		

Number of seconds held if less than 10: _____ sec



Semi-Tandem. 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 30 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 positioned, ask "Are you ready?" Then let go and begin timing as you say "Ready, begin." Stop the stopwatch and say "Stop" after 30 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.

B. Ser	mi-Tande	em St	and				
0	O Held 30 seconds (1 point) — Go to D. Tandem stand LONG						
0	O Held ≥10 but <30 seconds (1 point) — Go to C. Tandem stand SHORT						
0	O Held <10 sec (0 points) — Go to Section 2: Gait speed test						
0	Not att	empte	ed (0 points)				
		If pa	articipant could not complete or did not atten	npt t	rest, select the reason below:		
		0	Tried but unable	0	Participant unable to understand instructions		
		0	Could not hold position unassisted	0	Other, specify:		
	O Not attempted, you felt unsafe O Participant refused						
	O Not attempted, participant felt unsafe						
	Go to gait speed test						
	Numbe	er of se	econds held if less than 30:		sec		



Tandem SHORT (if semi-tandem held for 10 to 29.99 seconds). 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 positioned, 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. Record result and go to the gait speed test.

C . 1	Tandem S	and S	SHORT			
0	Held 10	econ	ds (2 points) — Go to Section 2: Ga	ait spe	ed test	
0	Held <u>></u> 3	– 9.9	9 seconds (1 point) ——— Go to Section	on 2: G	ait speed test	
0	Held <3	econ	ds (0 points) ——— Go to Section 2: G	ait sp	eed test	
0	Not atte	npted	d (O points)			
		If p	articipant could not complete or did not att	empt	test, select the reason below:	
		С	Tried but unable	0	Participant unable to understand instructions	
		С	Could not hold position unassisted	0	Other, specify:	
		С	Not attempted, you felt unsafe	0	Participant refused	
		С	Not attempted, participant felt unsafe			
		Go	to Section 2: Gait speed test			
	Number	of sec	conds held if less than 10:	sec		



Tandem LONG (if semi-tandem held for 30 seconds). 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 30 seconds. You may put eitherfoot 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 positioned, ask "Are you ready?" Then let go and begin timing as you say "Ready, begin." Stop the stopwatch and say "Stop" after 30 seconds or when the participant steps out of position or grabs your arm. If participant is unable to hold position for 30 seconds on either trial, record result and go to the gait speed test.

ບ. Tande	em Stand LONG		
Trial 1			
O Held	30 seconds (2 points) ——— Go to E. 1 leg stand		
	\geq 10 but <30 seconds (2 points) \longrightarrow Go to trial 2	!	
O Held	$1 \ge 3$ but <10 seconds (1 point) \longrightarrow Go to trial 2		
O Held	\geq 1 but <3 seconds (1 point) — Go to trial 2		
O Held	<1 second or unable to attain position (0 points) —		Go to Section 2: Gait speed test
O Not	attempted		
	If participant could not complete or did not atte	mpt	test, select the reason below:
	Tried but unable	0	Participant unable to understand instructions
	O Could not hold position unassisted	0	Other, specify:
	O Not attempted, you felt unsafe	0	Participant refused
	 Not attempted, participant felt unsafe 		
	Go to Section 2: Gait speed test		
Num	nber of seconds held if less than 30:	ес	
Num Trial 2	nber of seconds held if less than 30:	ec	
Trial 2	aber of seconds held if less than 30: Solution	ec	
Trial 2	iser of seconds field in less than so.		d test
Trial 2 O Held O Held	30 seconds	spee	
Trial 2 O Held O Held O Held O Held	30 seconds — Go to E. 1 leg stand ≥1 but <30 seconds Go to Section 2: Gait	spee	
Trial 2 O Held O Held O Held O Held	30 seconds	speed to Se	ction 2: Gait speed test
Trial 2 O Held O Held O Held O Held	30 seconds	speed to Se	ction 2: Gait speed test
Trial 2 O Held O Held O Held O Held	30 seconds	speed to Se	test, select the reason below: Participant unable to understand instructions
Trial 2 O Held O Held O Held O Held	30 seconds	mpt i	test, select the reason below:
Trial 2 O Held O Held O Held O Held	30 seconds → Go to E. 1 leg stand ≥1 but <30 seconds → Go to Section 2: Gait <1 second or unable to attain position → Go attempted If participant could not complete or did not atte ○ Tried but unable ○ Could not hold position unassisted	mpt i	test, select the reason below: Participant unable to understand instructions Other, specify:

Number of seconds held if less than 30:



One Leg. Now I will show you the fourth movement. (Demonstrate) I want you to try to stand on one leg for about 30 seconds. You may stand on either leg, 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 foot. Try to hold this position until I tell you to stop. If you lose your balance, put your foot down. Stand next to the participant to help him/her into the position. Supply just enough support to the participant's arm to prevent loss of balance. When the participant has his/her leg lifted, ask "Are you ready?" Then let go and begin timing as you say "Ready, begin." Stop the stopwatch and say "Stop" after 30 seconds or when the participant lowers leg to the floor or grabs your arm.

	ne Leg Stand
0	Held 30 seconds — Go to Section 2: Gait speed test Held ≥1 but <30 seconds — Go to trial 2 Held <1 second or unable to attain position — Go to Section 2: Gait speed test Not attempted — Go to Section 2: Gait speed test
	If participant could not complete or did not attempt test, select the reason below:
	O Tried but unable O Participant unable to understand instructions
	O Could not hold position unassisted O Other, specify:
	O Not attempted, you felt unsafe O Participant refused
	O Not attempted, participant felt unsafe
	Go to Section 2: Gait speed test
0	Held 30 seconds — Go to Section 2: Gait speed test Held ≥1 but <30 seconds — Go to trial 2
0	Held <1 second or unable to attain position ——— Go to Section 2: Gait speed test
0	Not attempted ———
	If participant could not complete or did not attempt test, select the reason below: O Tried but unable O Participant unable to understand instructions O Could not hold position unassisted O Other, specify: O Not attempted, you felt unsafe O Participant refused O Not attempted, participant felt unsafe Go to Section 2: Gait speed test
	Number of seconds held if less than 30: sec



Section 2: Gait Speed Test

First 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. 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." Start timing when the participant lifts their foot to begin walking. Walk behind and to the side of the participant. Stop timing when the heel of the first foot completely crosses the end line.

participant. Stop timing when the neel of the first foo	ot completely crosses the end line.	
A. First Gait Speed Test (sec)		
Time for first 4 meter walk (seconds):		
If participant could not complete or did not attem	pt test, select the reason below:	
O Tried but unable	O Participant unable to understand instructions	
O Could not hold position unassisted	O Other, specify:	
O Not attempted, you felt unsafe	O Participant refused	
O Not attempted, participant felt unsafe		
Aids used for first walk:		
O None		
O Cane		
Other (specify):	_	
other end of the course. Have the participant stan "Ready? Begin." When the participant acknowled	eat the walk. Remember to walk at your usual pace, and with both feet touching the starting line. When I want ges this instruction say: "Ready? Begin." Start timing value of the participant. Stop timing when the heel of the firm	you to start, I will say when the participant lifts
B. Second Gait Speed Test (sec) Time for first 4 meter walk (seconds): If participant could not complete or did not attem	pt test, select the reason below:	
	O Participant unable to understand instructions	
_	Other, specify:	
	O Participant refused	
Not attempted, participant felt unsafe		
Aids used for second walk:		
O None		
O Cane		
Other (specify):	_	
Faster of two times second	s	
MESA Exam 7 SPPB Interviewer-administered v2	2/8/2023	Page 6 of 10



4 Meter Walk SPPB Score

\cap	Time > 8.70 secs = 1	O Time 4.82 to 6.20 secs = 3	\circ	Unable to $do = 0$
\circ	111116 / 0.70 3603 - 1	O TITLE 4.02 to 0.20 secs = 3	\sim	Ullable to do - 0

O Times 6.21 to 8.70 secs = 2 O Time < 4.82 secs = 4

Section 3: Narrow Walk Test (4 meters)

Narrow Walk Test. Now I am going to observe how you walk keeping your feet inside the lines. I want you to walk to the other end of the course at your usual speed. It is important that you do your best to keep your feet inside the lines. Demonstrate the walk for the participant. Be sure to walk a few steps past the finish line. 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." Start timing when the participant lifts their foot to begin walking. Walk behind the participant so that you can see if either foot touches a line. Stop timing when the first foot (heel) is completely across the end line. "Not staying within the lines" is defined as stepping on, or going outside of the colored tape two or more times. A wall touch is considered stepping on the line. Perform a maximum of 3 trials to obtain 2 valid trials.

Trial 1 Was the walk completed? O Yes: Did the participant stay within the lines? ("Not staying within the lines" is defined as stepping on, or going outside of the colored tape two or more times. Perform up O No to 3 trials to obtain 2 valid times.) O Yes: seconds O No If participant could not complete or did not attempt test, select the reason below: O Tried but unable O Participant unable to understand instructions O Could not hold position unassisted Other, specify: O Not attempted, you felt unsafe O Participant refused O Not attempted, participant felt unsafe Go to Section 4: Chair stand test if not completed or not attempted



T	ri	ia	ı	2

<u>rial 2</u>	
Was the walk completed	1?
O Yes:	Did the participant stay within the lines? ("Not staying within the lines" is defined as stepping on, or going outside of the colored tape two or more times. Perform up to 3 trials to obtain 2 valid times.) O Yes: No
If particip	pant could not complete or did not attempt test, select the reason below:
O Trie	d but unable O Participant unable to understand instructions
O Cou	ld not hold position unassisted O Other, specify:
	attempted, you felt unsafe O Participant refused attempted, participant felt unsafe
Go to Sec	tion 4: Chair stand test if not completed or not attempted
rial 3	
Was the walk complete	d?
O Yes: ———	Did the participant stay within the lines? ("Not staying within the lines" is defined as stepping on, or going outside of the colored tape two or more times. Perform up to 3 trials to obtain 2 valid times.) O Yes: Seconds
	O No
If partici	pant could not complete or did not attempt test, select the reason below:
	ed but unable O Participant unable to understand instructions
	ald not hold position unassisted Other, specify:
	attempted, you felt unsafe O Participant refused
	attempted, participant felt unsafe
	ction 4: Chair stand test if not completed or not attempted
(an th \ea	CHON 4: Unair Stand test it not completed or not attempted



Section 4: Chair Stand Test

Single Chair Stand Test. 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 flat on the floor; then stand up, keeping your arms folded across your chest. When the participant is properly seated, say "Please stand up keeping your arms folded across your chest." If the participant cannot rise without using arms, say "Okay, try to stand up using your arms." Record result and end test.

Single Chair S	<u>stand Test</u>	
Does the participant feel safe enough to stand without help?		
O Yes	O No	
Mark the res	ult:	
O Participant stood without using arms ———— Go to repeated chair stand test		
O Participant used arms to stand ——— End Test		
O Test not completed ———		
	<u> </u>	
	If participant could not complete or did not att	empt test, select the reason below:
	Tried but unable	O Participant unable to understand instructions
	O Could not hold position unassisted	O Other, specify:
	O Not attempted, you felt unsafe	O Participant refused
	 Not attempted, participant felt unsafe 	
	End test	
	(



Repeated Chair Stand Test. 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. Let me demonstrate. When the participant is properly seated, say "Ready? Stand." Begin timing. Count out loud as the participant arises 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: 1) uses his/her arms; 2) after 1 minute, if participant has not completed all five rises; or 3) 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?" If the participant says "yes", continue timing. If the participant says "no", stop the test.

punt says yes , continue timing. If the purticipant says no , stop the test.		
Repeated Chair Stand Test		
Does the participant feel safe enough to stand without help?		
O Yes O No		
Time (seconds) to complete 5 stands: (only enter if participant completes 5 stands)		
If participant could not complete or did not attempt test, select the reason below:		
O Tried but unable O Participant unable to understand instructions		
O Could not hold position unassisted O Other, specify:		
O Not attempted, you felt unsafe O Participant refused		
O Not attempted, participant felt unsafe		
Chair Stand SPPB Score		
O Participant unable to complete 5 chair stands or completes stands in >60 sec: 0 points		
○ Time ≥ 16.70 sec: 1 point		
O Time 13.70 to 16.69: 2 points		
O Time 11.20 to 13.69 sec: 3 points		
O Time ≤ 11.19 sec: 4 points		
Total SPPB Score		
Balance Test score points		
Gait Speed Test score points		
Chair Stand Test score points		
=		
Total Score points (sum of points above)		