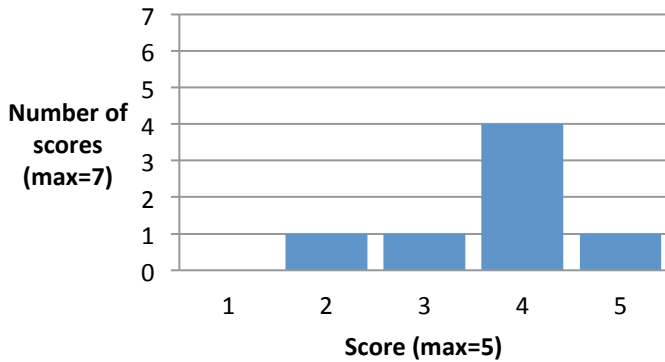


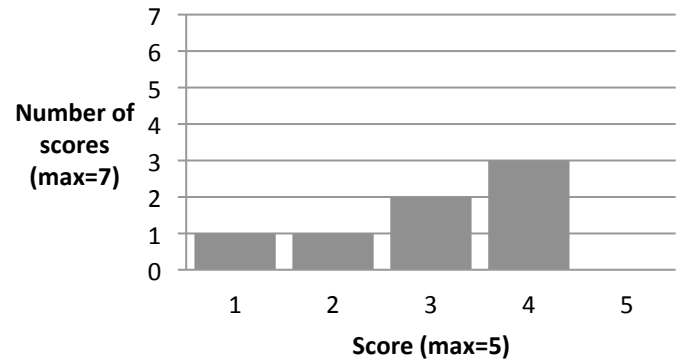
Measure ID	2
Name	Balance Computerized Adaptive Testing (CAT) System
Reference	Hsueh et al. Phys Ther. 2010
Purpose	To assess balance function in people with stroke
# of Items	34
Evaluation	Categorical
Parameters	
# of Categories	26 items have 2 scoring categories and 8 items have 3 scoring categories
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.7
Feasibility	3.0
Overall	3.0

Psychometric Score Distribution



Feasibility Score Distribution

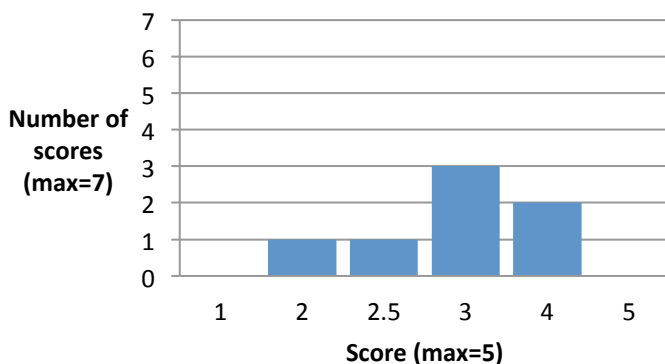


Comments from R1 Rankings: More evaluation needed • Stroke-specific so not sure of use in general population, many items refer to affected leg etc. Nothing on cost of equipment or training needed • Broad range of tests, each pass/fail. Long assessment • Need to discuss how feasible CAT system is to implement in practice •

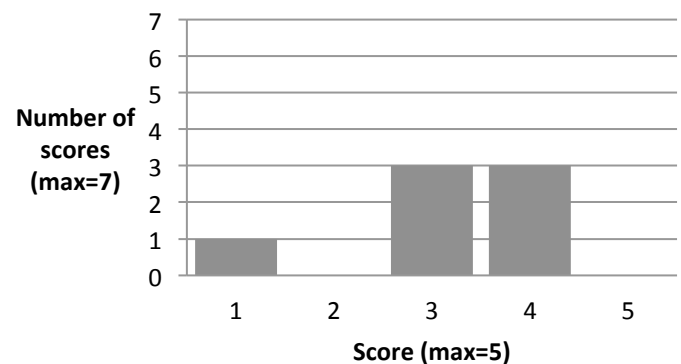
Measure ID	4
Name	Balance Error Scoring System (BESS)
Reference	Riemann et al. J Sport Rehabil. 1999
Purpose	To assess postural stability
# of Items	6
Evaluation	Continuous (number of errors)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.1
Feasibility	3.1
Overall	2.5

Psychometric Score Distribution



Feasibility Score Distribution

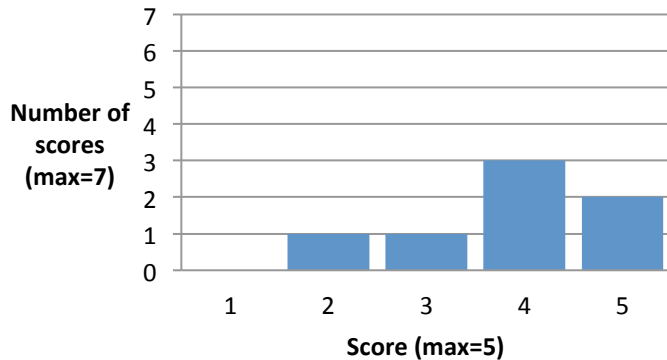


Comments from R1 Rankings: Sample was 'young varsity athletes' needs to be tested on those with balance issues • Administered to young athletes. Relies on clinician acumen in scoring • Have to buy special equipment; relevant for return to play decisions •

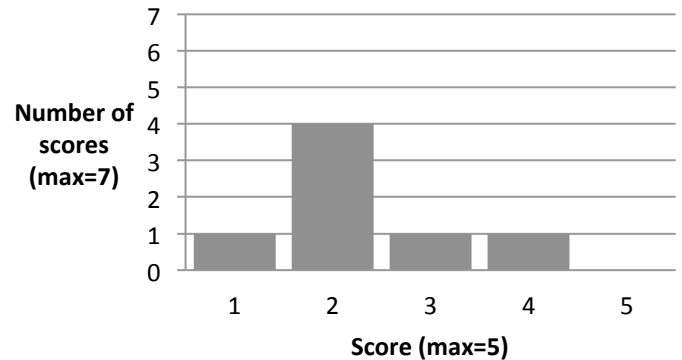
Measure ID	6
Name	Balance Evaluation Systems Test (BESTest)
Reference	Horak et al. Phys Ther. 2009
Purpose	To help physical therapists identify underlying postural control systems that may be responsible for poor functional balance
# of Items	36
Evaluation	Categorical
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.9
Feasibility	2.3
Overall	3.0

Psychometric Score Distribution



Feasibility Score Distribution

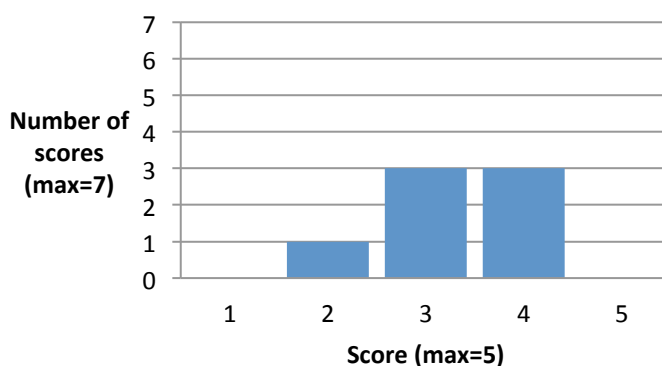


Comments from R1 Rankings: Best as follow-up tool in clinics • Long (30 min) assessment require clinician acumen and training. Broad range of complementary measures •

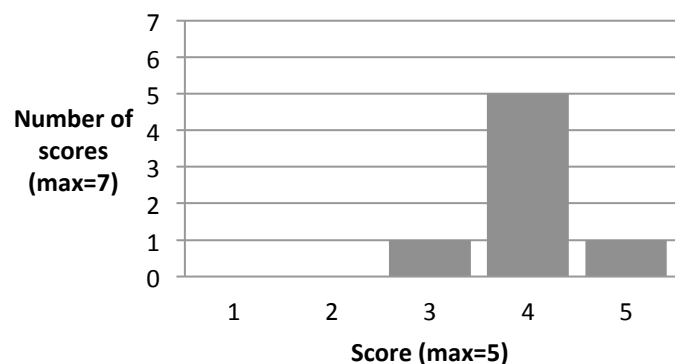
Measure ID	7
Name	Brief Balance Evaluation Systems Test (Brief BESTest)
Reference	Padgett et al. Phys Ther 2012
Purpose	To assess balance performance in 6 specific contexts of postural control to allow for identification of specific balance systems responsible for poor balance
# of Items	8
Evaluation	Categorical
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.3
Feasibility	4.0
Overall	3.7

Psychometric Score Distribution



Feasibility Score Distribution

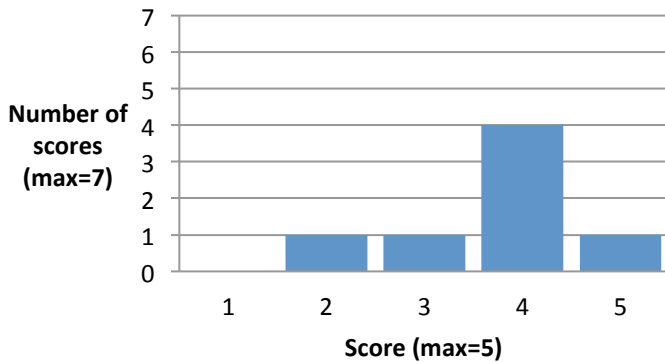


Comments from R1 Rankings: Cheap equipment, tested in 4 specific populations of LTCs, 10 mins to complete though • Short and easy to administer • Fall discrimination provided of little value •

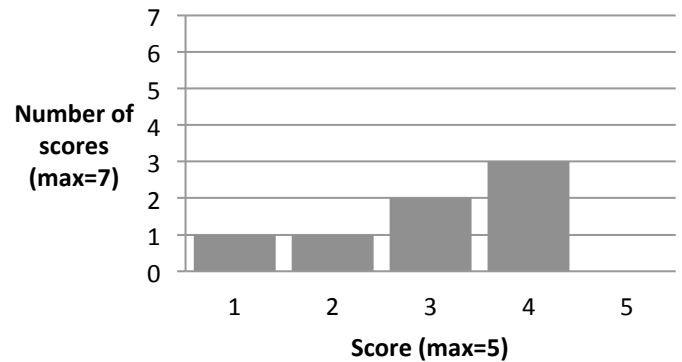
Measure ID	8
Name	Mini Balance Evaluation Systems Test (Mini BESTest)
Reference	Franchignoni et al. J Rehabil Med 2010
Purpose	To comprehensively assess balance in a short time period
# of Items	14
Evaluation	Categorical
Parameters	
# of Categories	3
Graded Progression	No

Mean Round 1 Results	
Psychometric	4.1
Feasibility	3.5
Overall	4.0

Psychometric Score Distribution



Feasibility Score Distribution

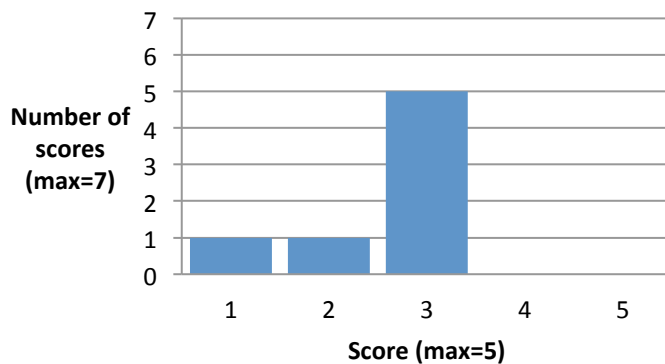


Comments from R1 Rankings: Too many items • Rasch analysis undertaken in sample with neurological conditions, not a normal sample •

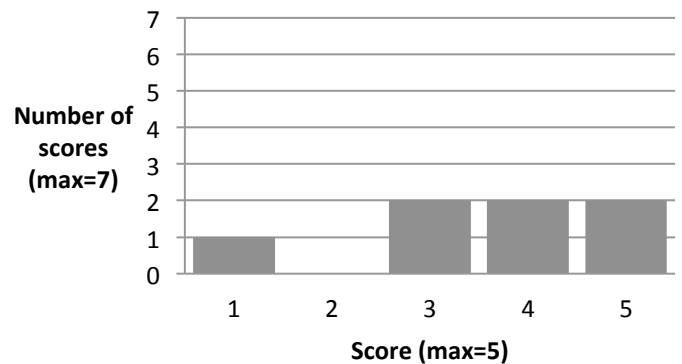
Measure ID	9
Name	Balance Outcome Measure for Elder Rehabilitation (BOOMER)
Reference	Haines et al. Arch Phys Med Rehabil. 2007]
Purpose	To be a global standing balance outcome measure for elder rehabilitation
# of Items	4
Evaluation	Categorical
Parameters	
# of Categories	5
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.6
Feasibility	3.6
Overall	2.8

Psychometric Score Distribution



Feasibility Score Distribution

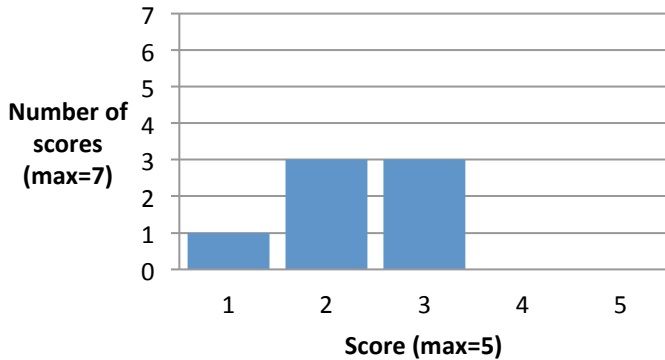


Comments from R1 Rankings: Addresses multiple dimensions • Large samples for reliability (n=784) and construct validity (n=272) •

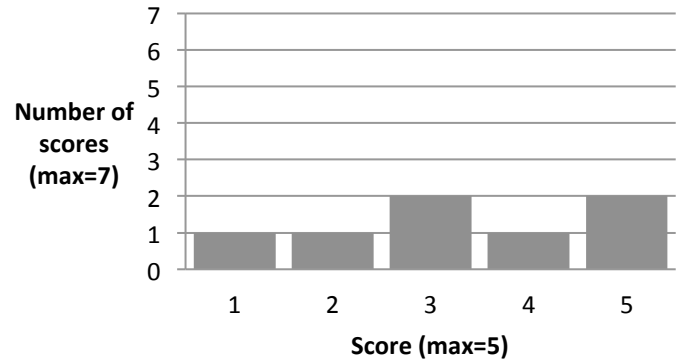
Measure ID	10
Name	BDL Balance Scale
Reference	Lindmark et al. Advances in Physiotherapy. 2012
Purpose	To quantitatively measure balance at a relatively high level
# of Items	10
Evaluation	Categorical
Parameters	
# of Categories	5
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.3
Feasibility	3.3
Overall	2.7

Psychometric Score Distribution



Feasibility Score Distribution

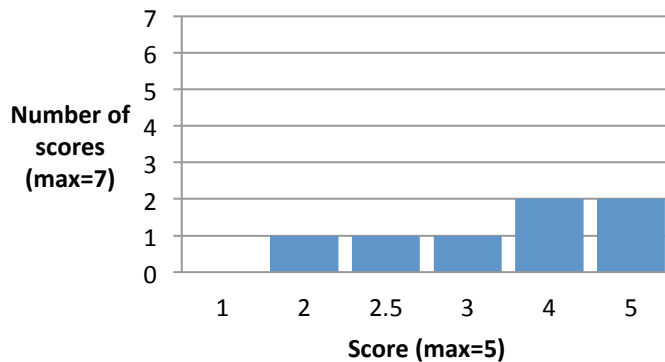


Comments from R1 Rankings: Inadequate evaluation of tool • Requires stairs, otherwise cheap and quick, working age stroke population but could be used for non-stroke, validity not tested • Small sample. Minimal change scores and SEM provided in paper • Only reliability tested •

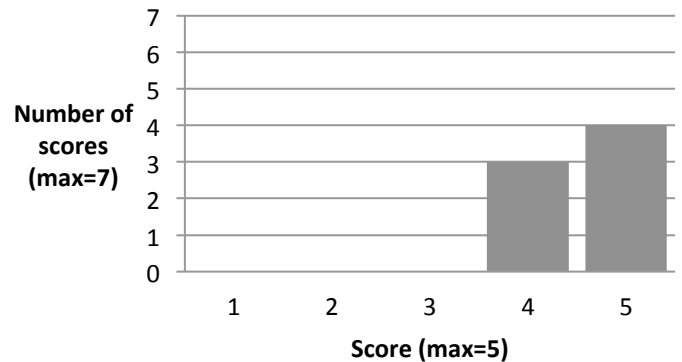
Measure ID	12
Name	Short Form of the Berg Balance Scale (SFBB)
Reference	Chou et al. Phys Ther. 2006
Purpose	To evaluate balance performance in people with stroke
# of Items	7
Evaluation	Categorical
Parameters	
# of Categories	3
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.6
Feasibility	4.6
Overall	4.0

Psychometric Score Distribution



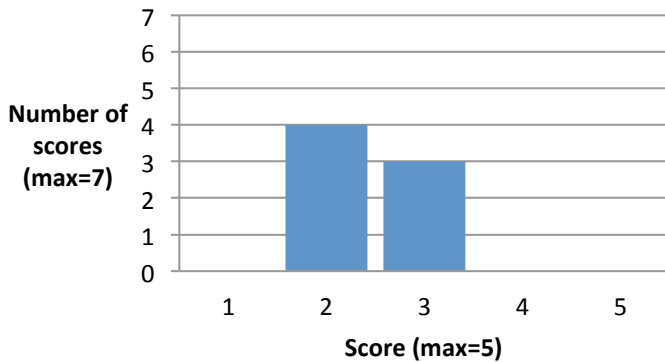
Feasibility Score Distribution



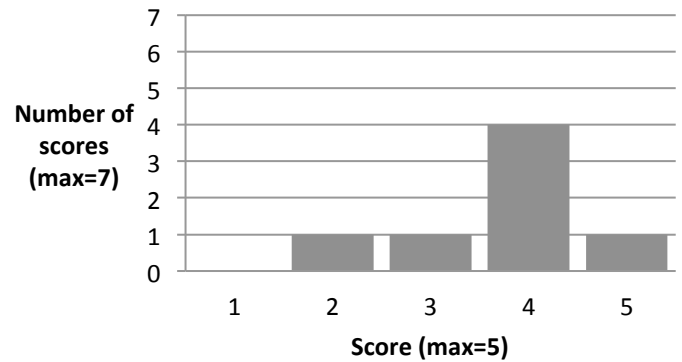
Comments from R1 Rankings: This short form would not take much time and is based on valid measures •

Measure ID	13	Mean Round 1 Results	
Name	Short Berg Balance Scale		
Reference	Hohtari-Kivimaki et al. Aging-Clinical & Experimental Research. 2012		Psychometric 2.4
Purpose	To assess functional balance among community-dwelling aged with moderate or good physical functioning		Feasibility 3.7
# of Items	9		Overall 2.5
Evaluation	Categorical		
Parameters			
# of Categories	5		
Graded Progression	No		

Psychometric Score Distribution



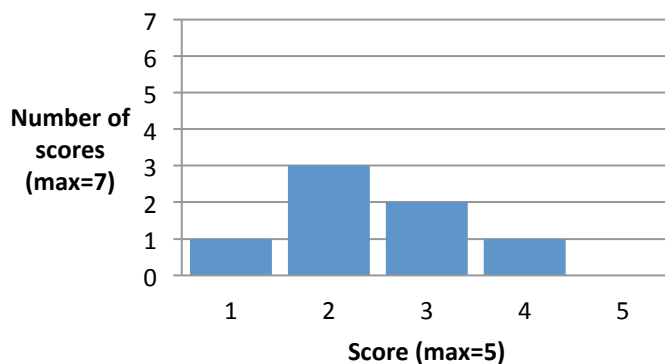
Feasibility Score Distribution



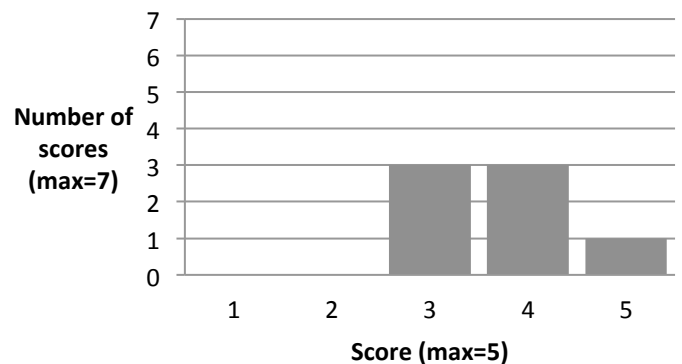
Comments from R1 Rankings: Insufficient evaluation; results mixed • Concurrent validity OK with force platform measures •

Measure ID	14	Mean Round 1 Results	
Name	Brunel Balance Assessment (BBA)		
Reference	Tyson et al. Clin Rehabil. 2004		Psychometric 2.4
Purpose	To assess the effects of specific stroke physiotherapy interventions for balance disability post stroke		Feasibility 3.7
# of Items	12		Overall 2.3
Evaluation	Categorical		
Parameters			
# of Categories	2		
Graded Progression	Yes		

Psychometric Score Distribution



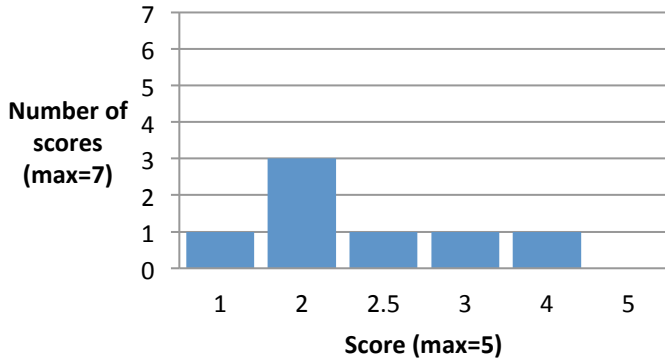
Feasibility Score Distribution



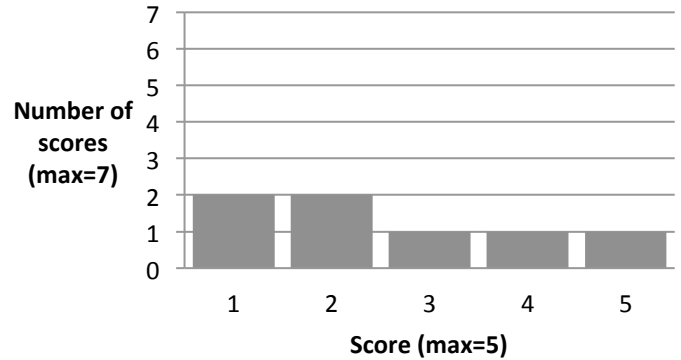
Comments from R1 Rankings: Insufficient evaluation; results mixed • Plinth, steps required, stroke population only, task force recommends only in stroke and not for research • One site, no replication •

Measure ID	16	Mean Round 1 Results
Name	Clinical Test of Sensory Interaction in Balance (CTSIB)	
Reference	??	
Purpose	To assess the influence of sensory interaction on postural stability in the standing patient with neurologic problems	
# of Items	6	
Evaluation	Suggests continuous (time) or categorical (subjective numeric ranking system for sway)	
Parameters		
# of Categories	N/A	Psychometric 2.4
Graded Progression	No	Feasibility 2.6
		Overall 2.2

Psychometric Score Distribution



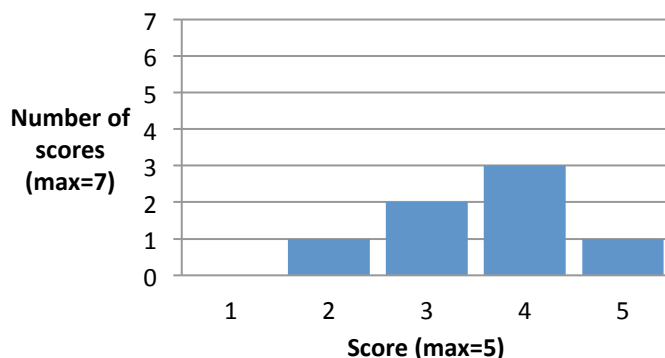
Feasibility Score Distribution



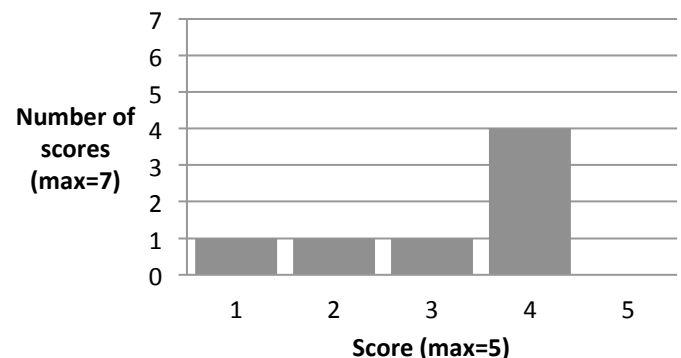
Comments from R1 Rankings: Potentially unsafe test to be conducted by untrained staff members • Measurement of sway is by observation. What data exists on performance is on small numbers only, but it has nice face validity. Not robust enough as it stands •

Measure ID	17	Mean Round 1 Results
Name	Community Balance and Mobility Scale (CB&M)	
Reference	Howe et al. Clin Rehabil. 2006	
Purpose	To identify postural instability, evaluate change following intervention and inform rehabilitation team about balance and mobility status of ambulatory individuals with traumatic brain injury returning to community environment	
# of Items	19	
Evaluation	Categorical	
Parameters		
# of Categories	6	Psychometric 3.6
Graded Progression	No	Feasibility 3.1
		Overall 3.5

Psychometric Score Distribution



Feasibility Score Distribution

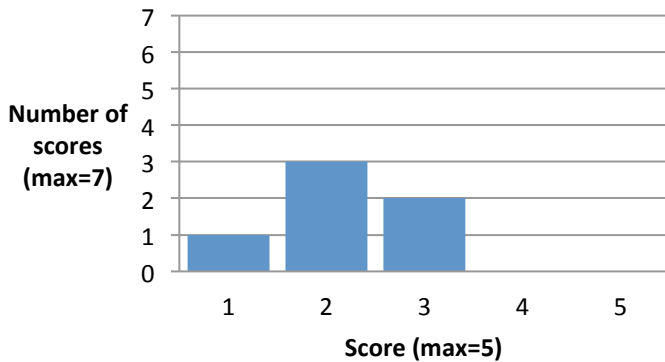


Comments from R1 Rankings: Excellent tool for TBI pts • May have a floor effect but this has not been conclusively demonstrated • Webased, time •

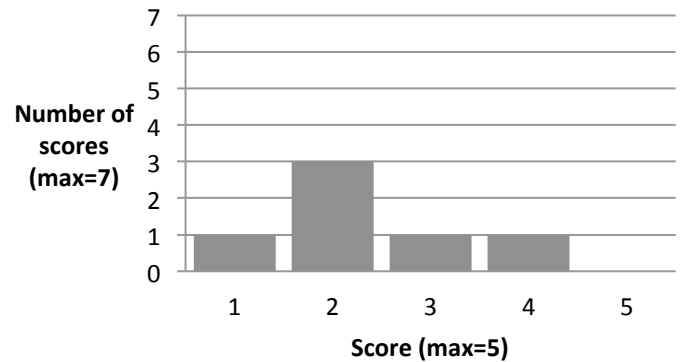
Measure ID	18
Name	Dynamic Balance Assessment (DBA)
Reference	Desai et al Phys Ther. 2010
Purpose	Not specified
# of Items	12
Evaluation	Categorical (continuous data collapsed into categories)
Parameters	
# of Categories	5
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.2
Feasibility	2.3
Overall	2.2

Psychometric Score Distribution



Feasibility Score Distribution

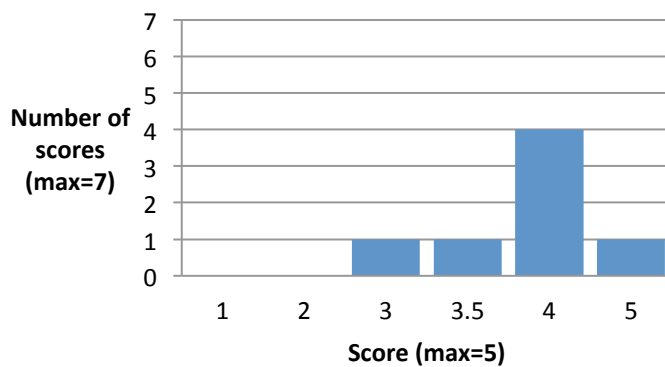


Comments from R1 Rankings: Insufficient evaluation; mixed results • Requires force platform, no cost given and nothing on training, only convergent validity given - community dwelling •

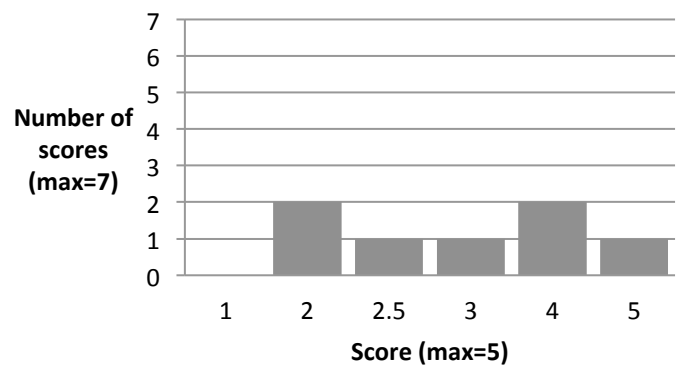
Measure ID	19
Name	Dynamic Gait Index
Reference	Shumway-Cook et al. Phys Ther. 1997
Purpose	To evaluate and document a patient's ability to modify gait in response to changing task demands
# of Items	8
Evaluation	Categorical
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.9
Feasibility	3.2
Overall	3.0

Psychometric Score Distribution



Feasibility Score Distribution

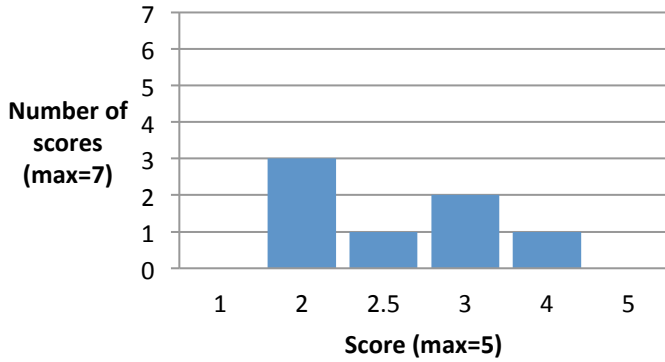


Comments from R1 Rankings: Cheap, takes less than 10 mins, but requires stairs, multiple LTC and comm dwelling, concerns about ceiling effects and poor responsiveness? • Same issue of time and training needed to conduct BERG • Requires person to be able to walk, so has a floor effect. The walk test requires a long walkway and hence may be problematic. Is a single snap shot of balance •

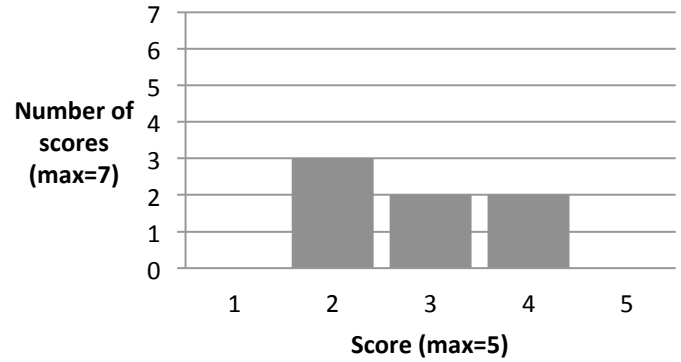
Measure ID	20
Name	Four-item Dynamic Gait Index (4-DGI)
Reference	Marchetti et al. Phys Ther. 2006
Purpose	To measure walking function in people with balance and vestibular disorders
# of Items	4
Evaluation	Categorical
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.6
Feasibility	2.9
Overall	2.3

Psychometric Score Distribution



Feasibility Score Distribution

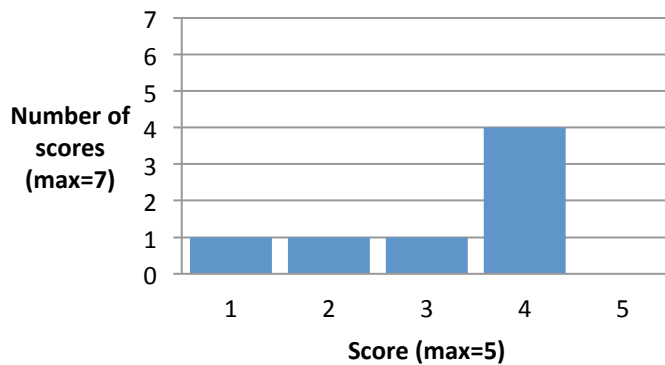


Comments from R1 Rankings: Easy to administer • Insufficient information on psychometric properties. Requires participants to be able to walk. Not clear if you can score zero if unable to walk •

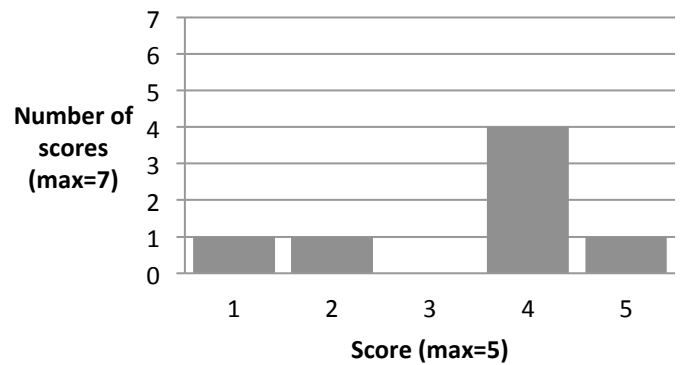
Measure ID	21
Name	Functional Gait Assessment (FGA)
Reference	Wrisley et al. Phys Ther. 2004
Purpose	To assess postural stability during gait with higher-level tasks
# of Items	10
Evaluation	Categorical
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.1
Feasibility	3.4
Overall	2.7

Psychometric Score Distribution



Feasibility Score Distribution

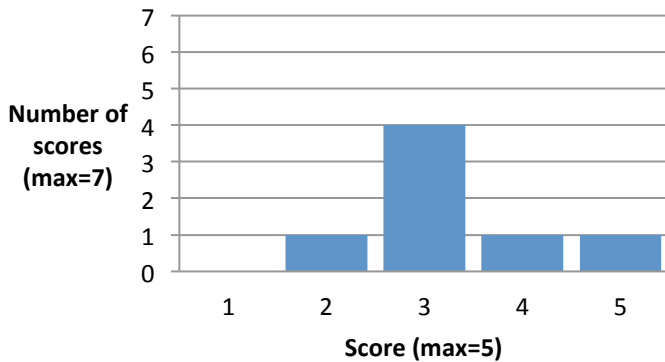


Comments from R1 Rankings: Well evaluated tool; multiple pops • Seems reasonable enough •

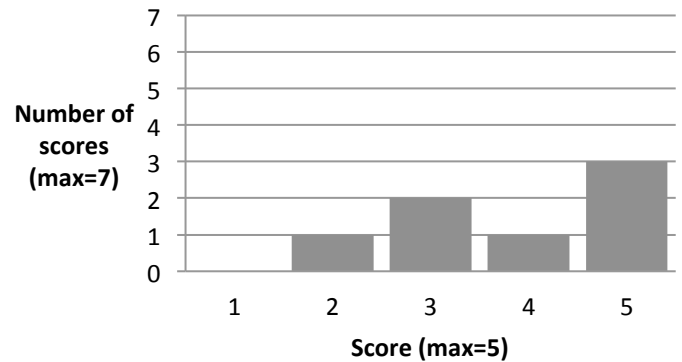
Measure ID	22
Name	Five Times Sit-to-Stand Test (5-STST)
Reference	Whitney et al. Phys Ther. 2005
Purpose	To measure balance dysfunction
# of Items	1
Evaluation	Continuous (time)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.3
Feasibility	3.9
Overall	2.8

Psychometric Score Distribution



Feasibility Score Distribution

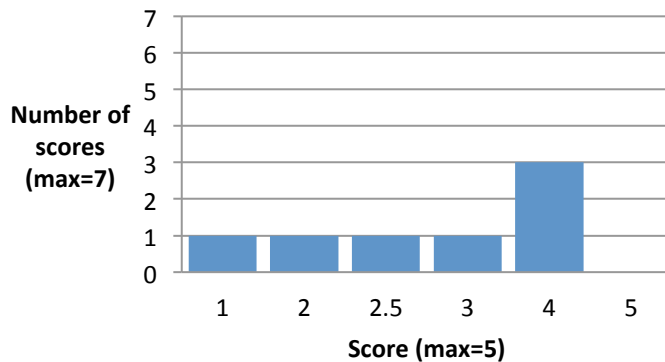


Comments from R1 Rankings: Better measure of LB strength • < 5 mins, cheap, no training, huge range of LTCs and OP, only one dimension of balance • I am not convinced that this is a measure that is specific to balance, and hence would not include it • Validity est. primarily for strength •

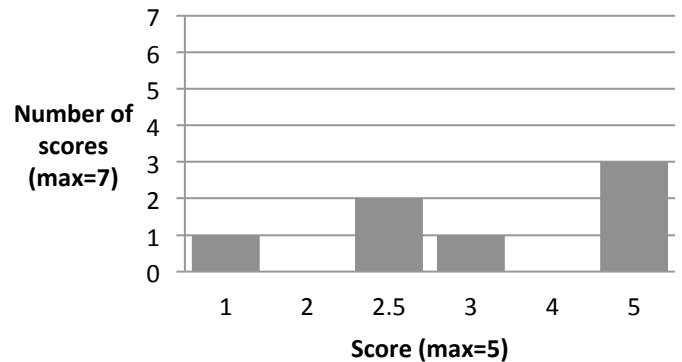
Measure ID	23
Name	Four Square Step Test (FSST)
Reference	Dite and Temple. Arch Phys Med Rehabil. 2002
Purpose	Not specified
# of Items	1
Evaluation	Continuous (time)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.9
Feasibility	3.4
Overall	2.5

Psychometric Score Distribution



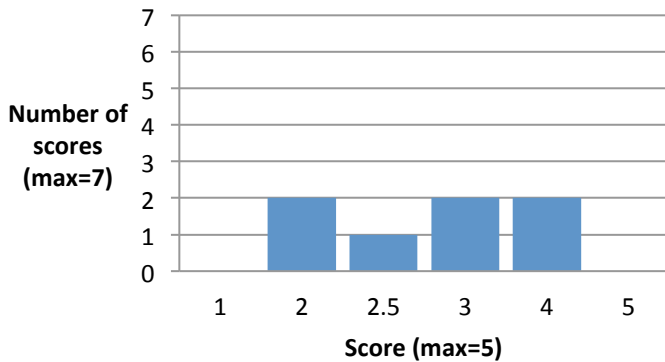
Feasibility Score Distribution



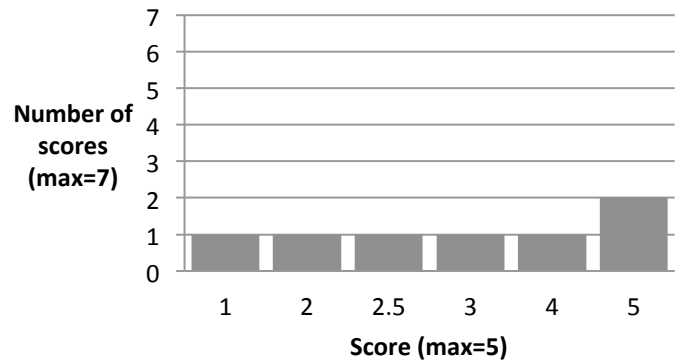
Comments from R1 Rankings: < 5 mins, cheap, but responsiveness in OP questionable? • Potentially unsafe test to be conducted by untrained staff members • Insufficient evidence of psychometric properties •

Measure ID	24	<table border="0"> <tr> <td colspan="2">Mean Round 1 Results</td> </tr> <tr> <td>Psychometric</td> <td>2.9</td> </tr> <tr> <td>Feasibility</td> <td>3.2</td> </tr> <tr> <td>Overall</td> <td>2.7</td> </tr> </table>	Mean Round 1 Results		Psychometric	2.9	Feasibility	3.2	Overall	2.7
Mean Round 1 Results										
Psychometric	2.9									
Feasibility	3.2									
Overall	2.7									
Name	Fullerton Advanced Balance (FAB) Scale									
Reference	Rose et al. Arch Phys Med Rehabil. 2006									
Purpose	To identify balance problems of varying severity in functionally independent older adults and evaluate system(s) that might be contributing to balance problems									
# of Items	10									
Evaluation	Categorical									
Parameters										
# of Categories	5									
Graded Progression	No									

Psychometric Score Distribution



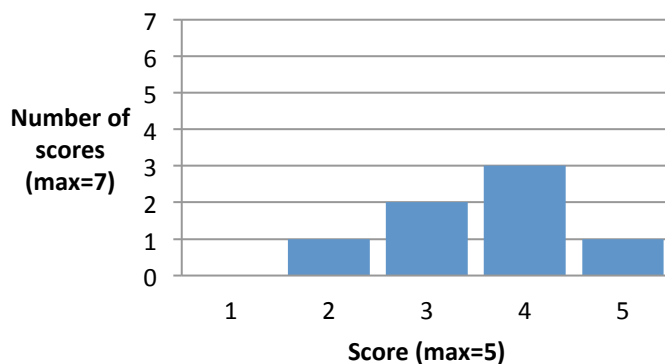
Feasibility Score Distribution



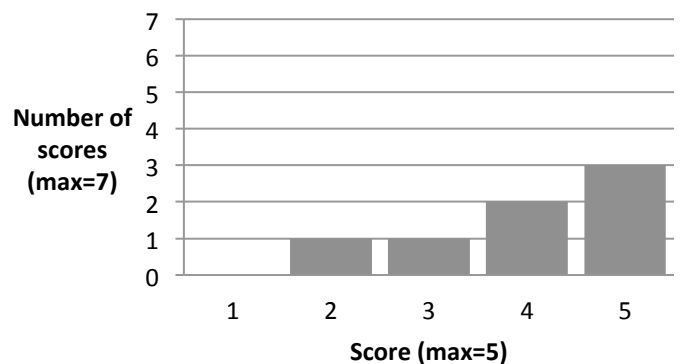
Comments from R1 Rankings: Insufficient evidence of psychometric properties • See value in individual items but test overall not well supported •

Measure ID	25	<table border="0"> <tr> <td colspan="2">Mean Round 1 Results</td> </tr> <tr> <td>Psychometric</td> <td>3.6</td> </tr> <tr> <td>Feasibility</td> <td>4.0</td> </tr> <tr> <td>Overall</td> <td>3.3</td> </tr> </table>	Mean Round 1 Results		Psychometric	3.6	Feasibility	4.0	Overall	3.3
Mean Round 1 Results										
Psychometric	3.6									
Feasibility	4.0									
Overall	3.3									
Name	Functional Reach Test									
Reference	Duncan et al. J Gerontol. 1990									
Purpose	To assess anterior and posterior dynamic stability									
# of Items	1									
Evaluation	Continuous (distance)									
Parameters										
# of Categories	N/A									
Graded Progression	No									

Psychometric Score Distribution



Feasibility Score Distribution

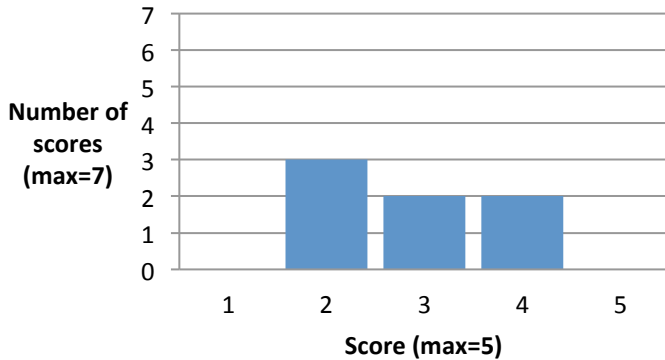


Comments from R1 Rankings: Screen only; very little use for determining best type of treatment • Should be considered but a practical limitation is the ability to stand and hold the shoulder to 90 degrees. Not always that easy in some populations (stroke), and is prone to non-completion in population surveys •

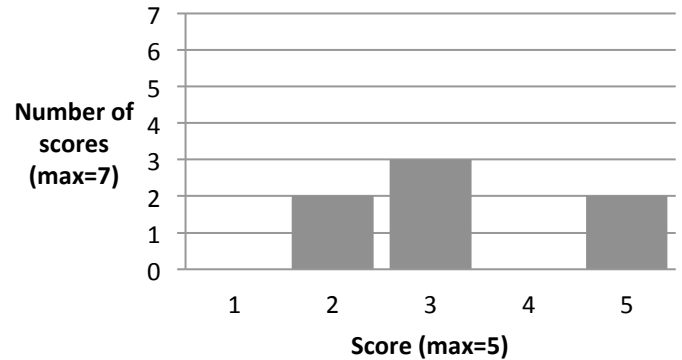
Measure ID	26
Name	Multidirectional Reach Test
Reference	Newton. J Gerontol A Biol Sci Med Sci. 2001
Purpose	To measure limits of stability in four reaching directions
# of Items	4
Evaluation	Continuous (distance)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.9
Feasibility	3.3
Overall	2.8

Psychometric Score Distribution



Feasibility Score Distribution

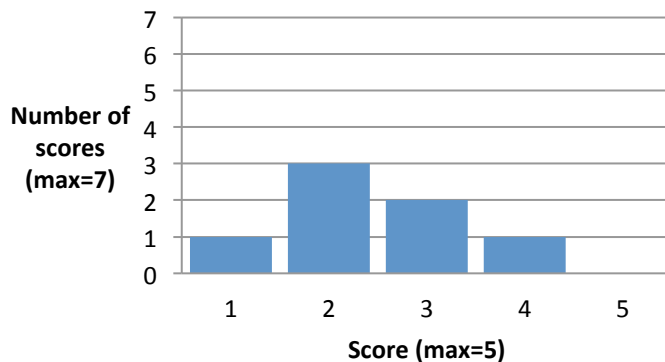


Comments from R1 Rankings: Inadequate evaluation of tool - lack of standardization re test administration • < 5 mins, poor reliability in OP, concerns about reaching and fear? Better than Functional Reach though! • Performance test requiring people to have good shoulder function and be able to stand. Likely to be difficult to use across a range of conditions •

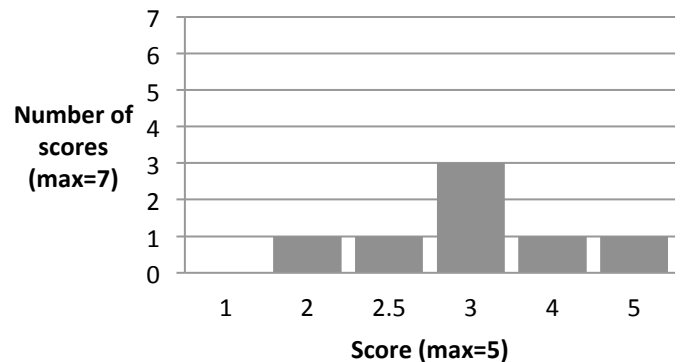
Measure ID	27
Name	Hierarchical Assessment of Balance and Mobility (HABAM)
Reference	MacKnight and Rockwood. Age & Ageing 1995
Purpose	Not specified
# of Items	24
Evaluation	Categorical
Parameters	
# of Categories	2
Graded Progression	Yes

Mean Round 1 Results	
Psychometric	2.4
Feasibility	3.2
Overall	2.3

Psychometric Score Distribution



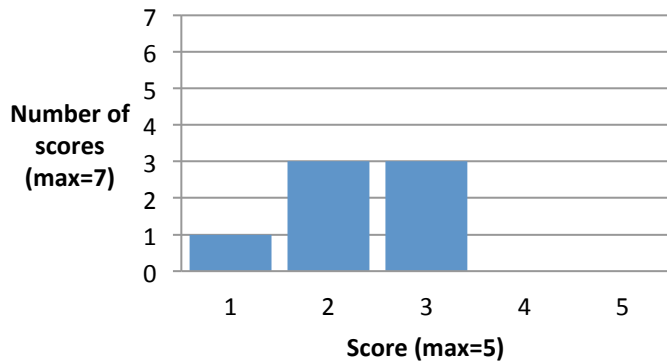
Feasibility Score Distribution



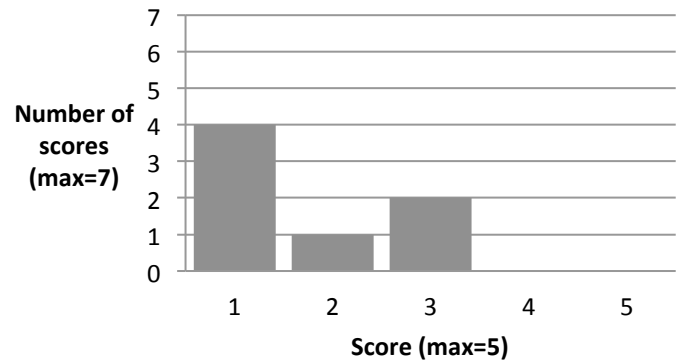
Comments from R1 Rankings: Quick, cheap and shows progression but concerns about ceiling effects in higher functioning OP. Used in hospital settings so far • Too many items • I am surprised that this really neat little measure does not have more psychometric data to support its performance •

Measure ID	28	Mean Round 1 Results Psychometric 2.3 Feasibility 1.7 Overall 1.7
Name	Limits of Stability Test (LOS)	
Reference	Clark et al. Arch Phys Med Rehabil. 1997	
Purpose	To assess multiple indices of dynamic balance performance by evaluating individual's ability to volitionally move the center of gravity to 8 predetermined positions	
# of Items	8	
Evaluation Parameters	Continuous (center of gravity velocity, excursion, endpoint, directional control)	
# of Categories	N/A	
Graded Progression	No	

Psychometric Score Distribution



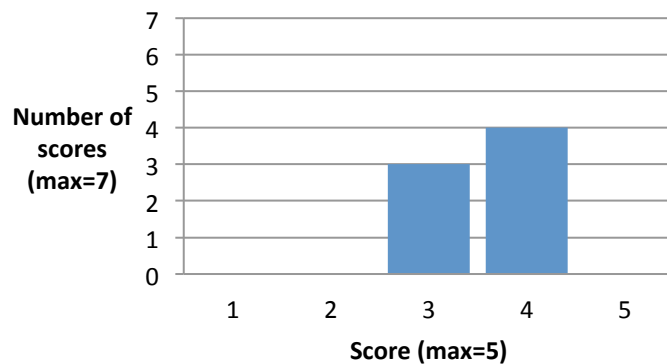
Feasibility Score Distribution



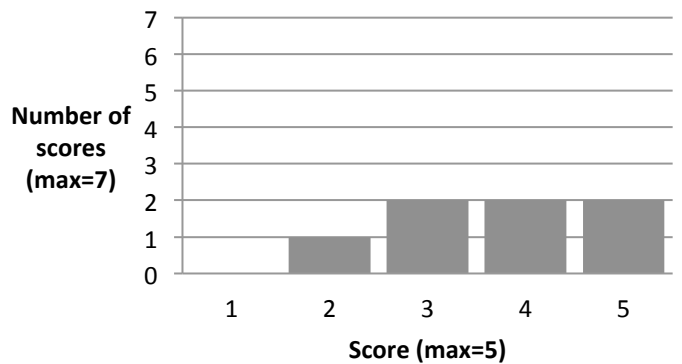
Comments from R1 Rankings: Quite a good test, but with inadequate evidence of psychometric properties •

Measure ID	31	Mean Round 1 Results Psychometric 3.6 Feasibility 3.7 Overall 3.3
Name	Performance Oriented Mobility Assessment (POMA)	
Reference	Tinetti. J Am Geriatr Soc. 1986	
Purpose	To practically assess performance-oriented mobility tasks that incorporates useful features of both disease-oriented and gait analytic approaches	
# of Items	Balance- 13, Gait- 9	
Evaluation Parameters	Categorical	
# of Categories	3 for balance item and 2 for gait items	
Graded Progression	No	

Psychometric Score Distribution



Feasibility Score Distribution

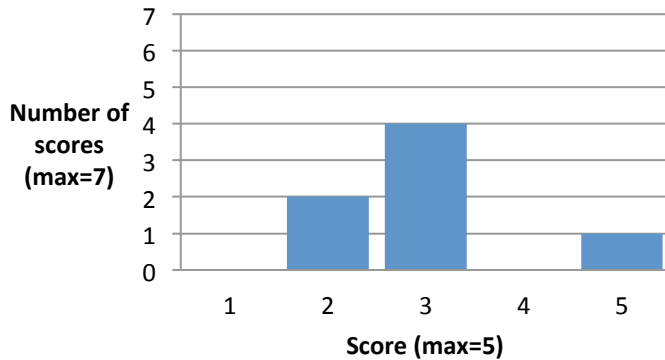


Comments from R1 Rankings: Can take up to 30 mins, wide range of LTCs and OP, cheap • Training required to conduct properly. Takes up to 15 minutes to compete • There is a lot of data on this measure that is not picked up in the review. It has a very solid epidemiological base, and is a good simple measure • Sub-optimal inclusion of balance measures, requires clinical acumen • Questionable for higher functioning adults • Ceiling effects, aimed at elderly, no responses or sensory conditions •

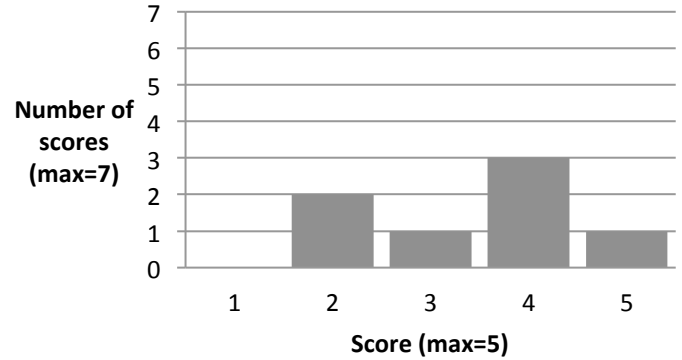
Measure ID	33
Name	Postural Assessment Scale for Stroke Patients (PASS)
Reference	Benain et al. Stroke. 1999
Purpose	To assess and monitor postural control after stroke; to assess subject performance
# of Items	14
Evaluation	Categorical only
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.0
Feasibility	3.4
Overall	2.7

Psychometric Score Distribution



Feasibility Score Distribution

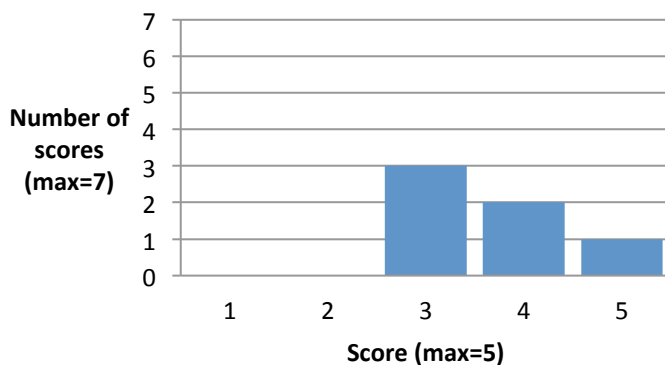


Comments from R1 Rankings: • Useful measure of progress in first 3 mos post-stroke • Has some evidence of psychometric adequacy but is limited to stroke populations • Small study for psychometric assessment • Not general for all elderly •

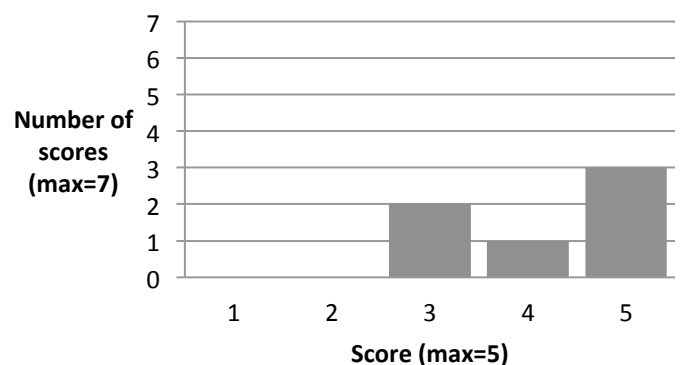
Measure ID	34
Name	Short Form of Postural Assessment Scale for Stroke Patients (SFPASS)
Reference	Chien et al. Neurorehabil Neur Repair. 2007
Purpose	To measure balance function in people with stroke
# of Items	5
Evaluation	Categorical
Parameters	
# of Categories	3
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.7
Feasibility	4.2
Overall	3.2

Psychometric Score Distribution



Feasibility Score Distribution

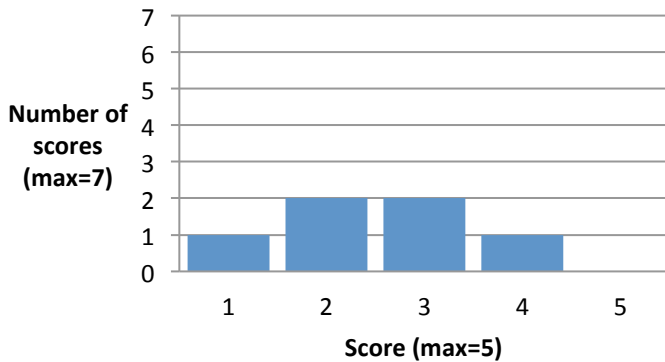


Comments from R1 Rankings: Could be used in conjunction with PASS to monitor change during treatment phase • Stroke specific, quick and cheap, can be used with non stroke but not done so yet :(• Psychometric data limited to stroke, where it is good. Not sure if you are intending to give disease specific recommendations, if so include. If not exclude •

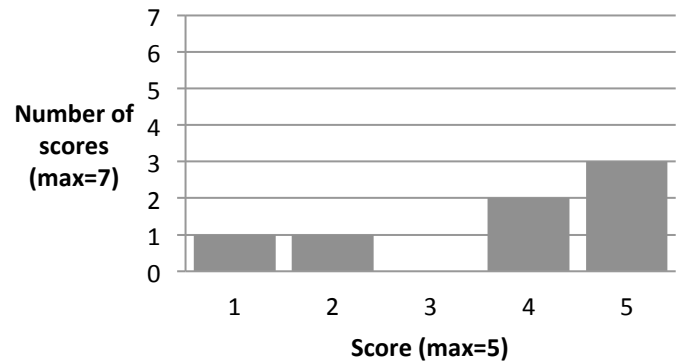
Measure ID	35
Name	Pull/ Retropulsion Test
Reference	Visser et al. Arch Phys Med Rehabil. 2003
Purpose	To assess the ability to maintain balance
# of Items	1
Evaluation	Categorical
Parameters	
# of Categories	4
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.5
Feasibility	3.7
Overall	2.8

Psychometric Score Distribution



Feasibility Score Distribution

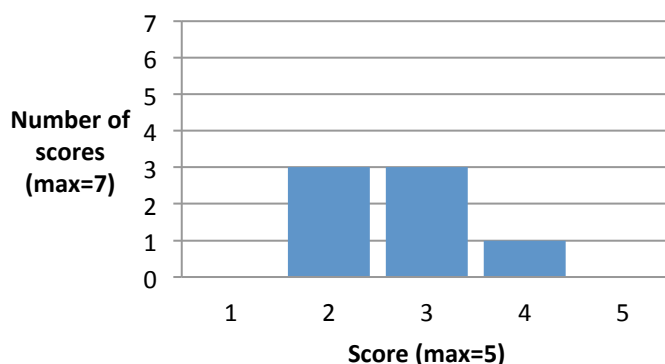


Comments from R1 Rankings: Quick, but limited info on balance, no test retest • Potentially unsafe test to be conducted by untrained staff members • Limited to Parkinson’s only, pull test has quite a lot of difficulties in administration • Important component •

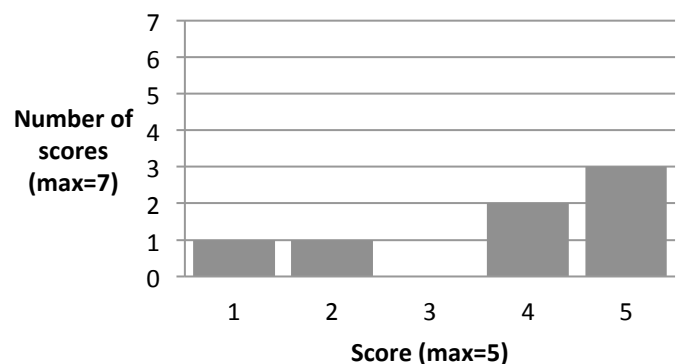
Measure ID	36
Name	Push and Release Test
Reference	Jacobs et al. J Neurol. 2006
Purpose	To reliably assess postural stability with sensitivity to fall history and low balance confidence in Parkinson's Disease
# of Items	1
Evaluation	Categorical
Parameters	
# of Categories	5
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.7
Feasibility	3.7
Overall	3.3

Psychometric Score Distribution



Feasibility Score Distribution

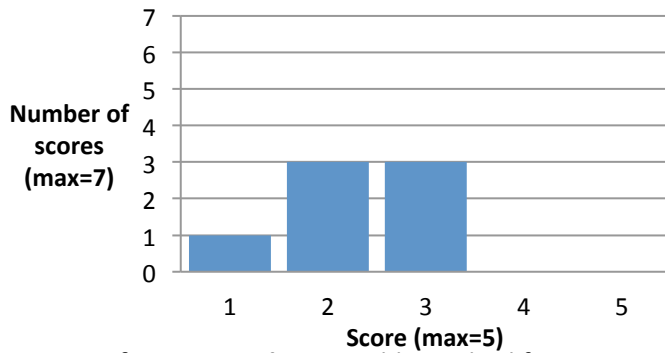


Comments from R1 Rankings: Potentially unsafe test to be conducted by untrained staff members • Limited to Parkinson’s, limited evidence on psychometric tests, likely to be hard to implement in a standardized reliable way • Conflict; important component •

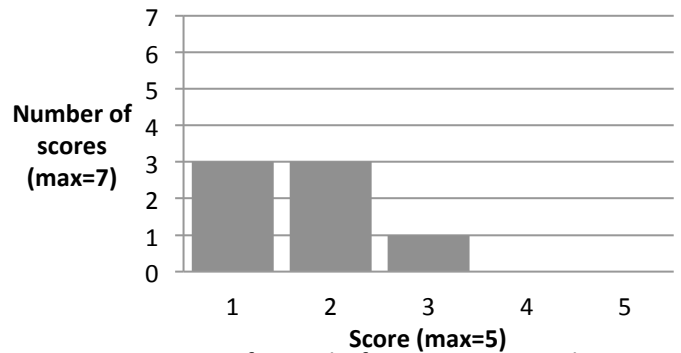
Measure ID	38
Name	Sensory Organization Test (SOT)
Reference	Ford-Smith et al. Arch Phys Med Rehabil. 1995
Purpose	To assess ability to make effective use of visual, vestibular, and proprioceptive inputs separately and the ability to suppress inaccurate sensory information
# of Items	6
Evaluation Parameters	Continuous (2 outcomes per condition)
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.3
Feasibility	1.7
Overall	1.7

Psychometric Score Distribution



Feasibility Score Distribution

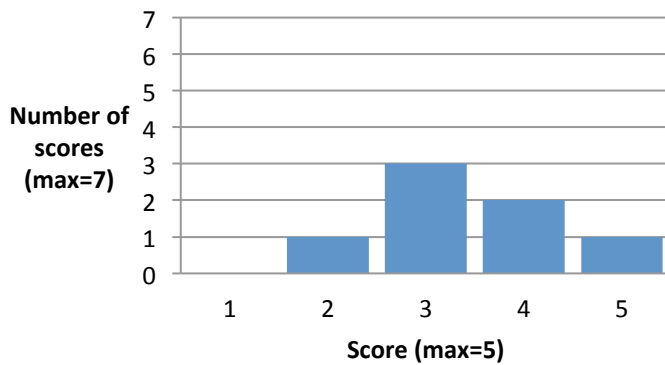


Comments from R1 Rankings: Gold standard for measuring SR & I • Requires expensive force platform, 15 mins to do, very expensive, test retest not brilliant nothing on reliability • Insensitive to general balance problems, more a diagnostic tool for specific balance problems. Expensive and requiring force platform, 15 mins to do, very expensive, test retest not brilliant nothing on reliability • What about CTSIB? Limited scope •

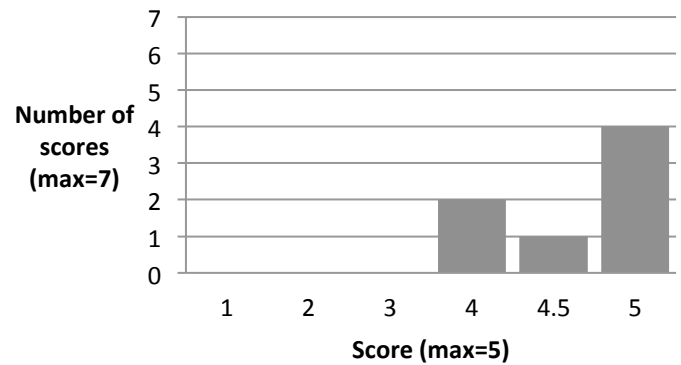
Measure ID	40
Name	Short Physical Performance Battery (SPPB)
Reference	Guralnik et al. J Gerontol. 1994
Purpose	To assess lower extremity function
# of Items	6
Evaluation Parameters	Standing and walking items = categorical; Rise from sitting item = continuous (time)
# of Categories	Timed standing: side-by-side stand = 2, semi-tandem = 5, tandem = 3. Walking item: 5 categories depending on time
Graded Progression	Standing and rise from sitting items were graded

Mean Round 1 Results	
Psychometric	3.4
Feasibility	4.6
Overall	3.2

Psychometric Score Distribution



Feasibility Score Distribution

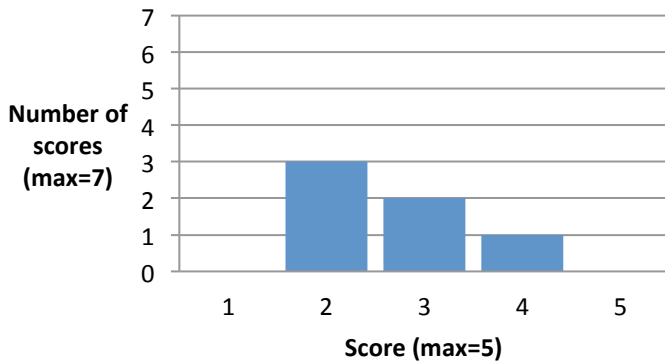


Comments from R1 Rankings: Feasibility of use enhanced by training video available for lay people to conduct the test safely in client homes • A good measure which has a mass of data to support various aspects of validity (not included in the review). Simple to implement and use, and reasonably sensitive. Already being used in clinical trials. Should be considered • Intended to predict disability, mortality, nursing home admission • Needs postural response and sensory conditions and dual tasks •

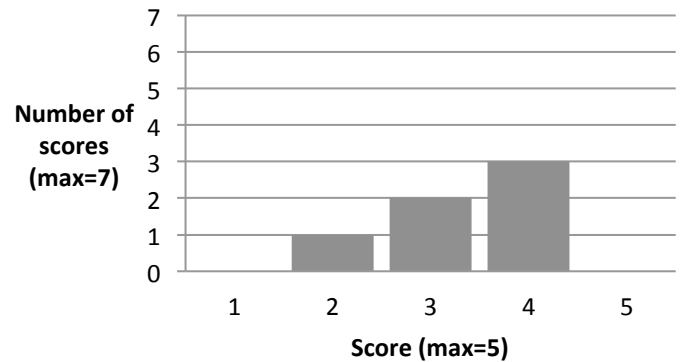
Measure ID	41
Name	Side-Step Test
Reference	Fujisawa et al. Clin Rehabil. 2006
Purpose	To assess dynamic standing balance in the frontal plane
# of Items	1
Evaluation	Continuous (distance)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.7
Feasibility	3.3
Overall	2.6

Psychometric Score Distribution



Feasibility Score Distribution

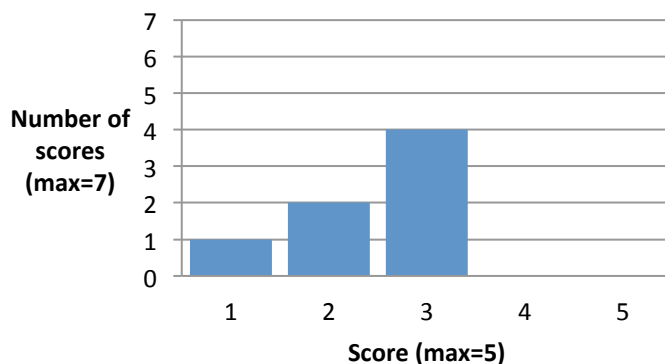


Comments from R1 Rankings: Better tools to evaluate balance in post-stroke population • Inadequate evidence for psychometric qualities •

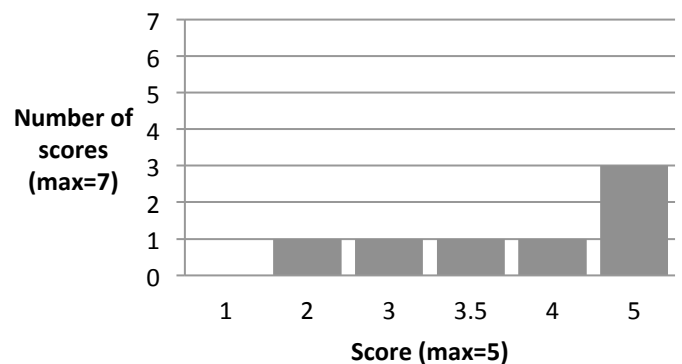
Measure ID	43
Name	Single leg Stance Test
Reference	Bohannon. Topics Geri Rehabil. 2006
Purpose	To quantify standing balance
# of Items	1 or 2 (if one leg or both legs tested)
Evaluation	Continuous (time)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.4
Feasibility	3.9
Overall	2.7

Psychometric Score Distribution



Feasibility Score Distribution

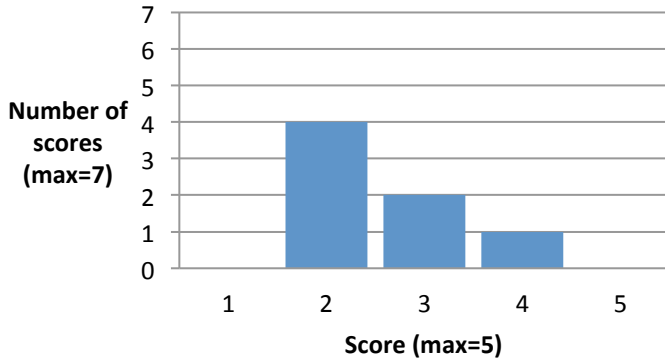


Comments from R1 Rankings: very quick, only one aspect of balance, floor effects as many OP cannot stand on 1 leg, little on psychom prop • Easy to administer • Inadequate evidence for psychometric qualities, limited to Parkinson's only • Impractical for elderly •

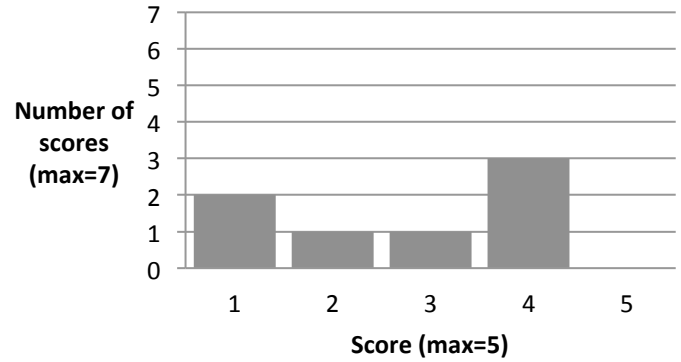
Measure ID	44
Name	Spring Scale Test (SST)
Reference	DePasquale and Toscano. J Geri Phys Ther. 2009
Purpose	To assess and quantify effective limits of anterior-posterior stepping for the purposes of fall risk assessment
# of Items	2
Evaluation	Continuous (% body weight)
Parameters	
# of Categories	N/A
Graded Progression	Yes

Mean Round 1 Results	
Psychometric	2.6
Feasibility	2.7
Overall	2.2

Psychometric Score Distribution



Feasibility Score Distribution

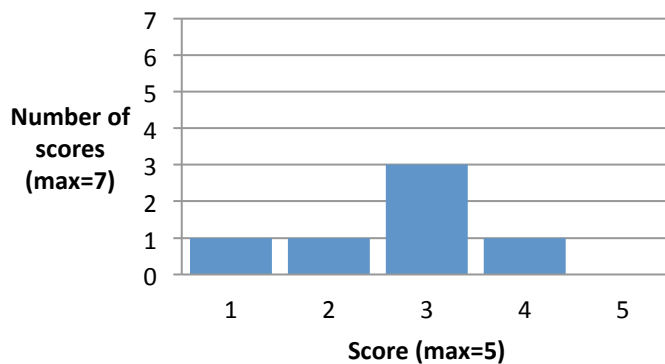


Comments from R1 Rankings: Equipment cost of \$160. training not mentioned •

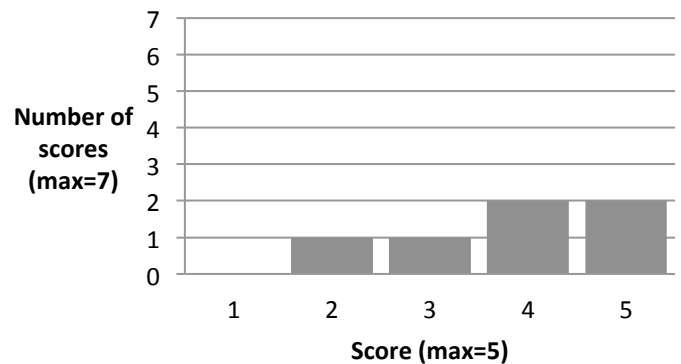
Measure ID	47
Name	Step Test (ST)
Reference	Hill et al. Physiotherapy Canada. 1996
Purpose	To meet the need for a clinically useful test of balance that incorporates dynamic single limb stance
# of Items	6
Evaluation	Continuous (number of steps up to 7.5 cm in 15 and 30 s and 15 cm in 15 s on each leg)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.7
Feasibility	3.8
Overall	2.6

Psychometric Score Distribution



Feasibility Score Distribution

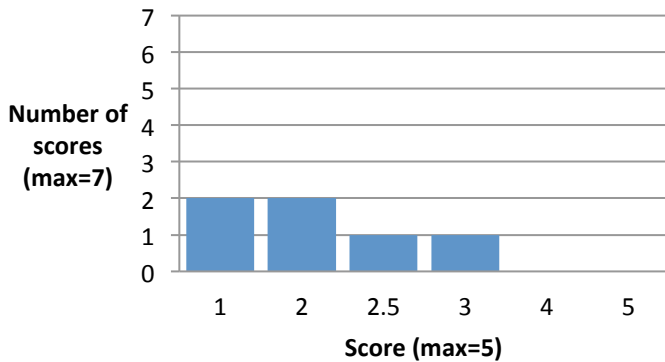


Comments from R1 Rankings: <5 mins, needs a step, will be floor effects?, psych prop in stroke patients but also used in OP • Limited practical application compared to more multidimensional measures • See some value in this task more generally •

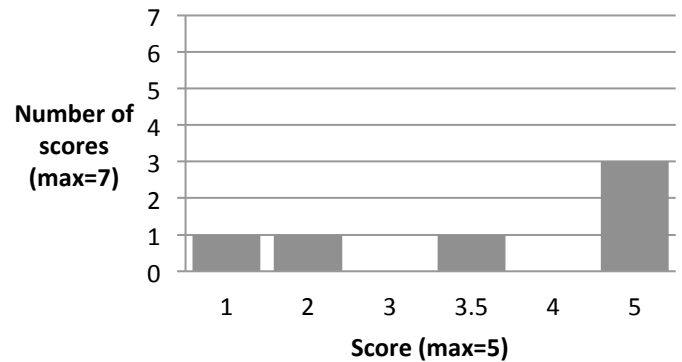
Measure ID	48
Name	Tandem Stance
Reference	Hile et al. Phys Ther 2012
Purpose	To assess postural stability by narrowing the base of support
# of Items	2
Evaluation	Continuous (time)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	1.9
Feasibility	3.6
Overall	2.2

Psychometric Score Distribution



Feasibility Score Distribution

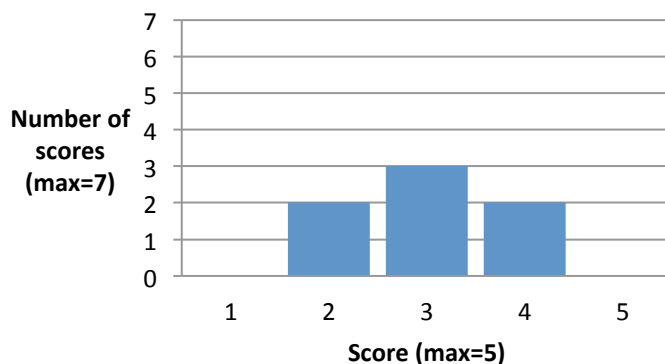


Comments from R1 Rankings: Easy to add hold time to existing tandem stance measure • See some value in this task more generally •

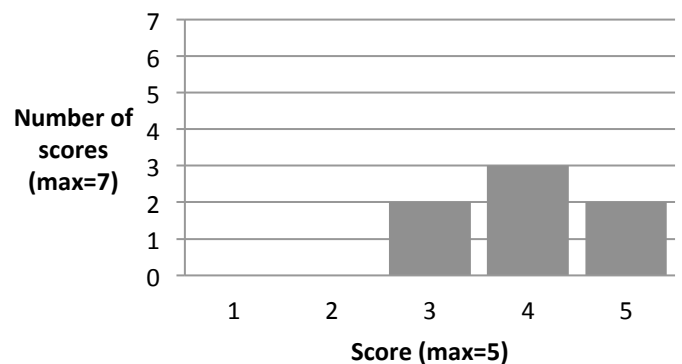
Measure ID	50
Name	Expanded Timed Up-and-Go Test (ETUG)
Reference	Botolfson et al. Phys Res Int. 2008
Purpose	To address shortcomings of the Get-up-and-Go and TUG tests
# of Items	5
Evaluation	Continuous (time)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.0
Feasibility	4.0
Overall	3.3

Psychometric Score Distribution



Feasibility Score Distribution

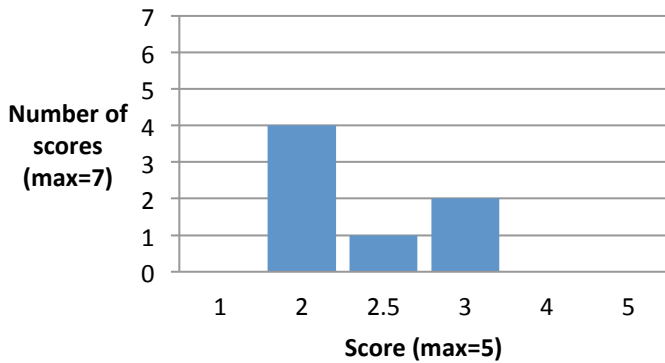


Comments from R1 Rankings: Evaluates more dimensions of balance but tool needs further testing on more samples • more info on balance than TUG, but limited psych prop, •

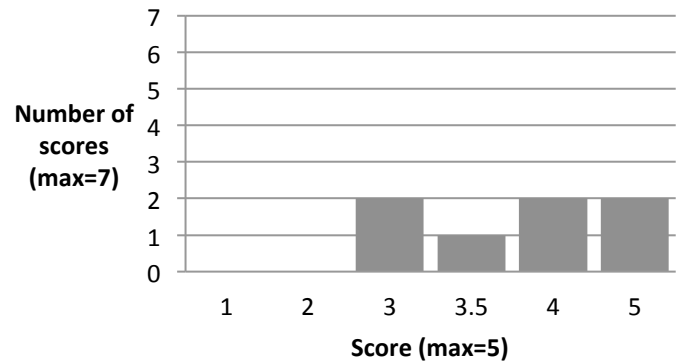
Measure ID	51
Name	TURN180
Reference	Simpson et al. Physiotherapy. 2002
Purpose	To be a simple, clinically useful test of dynamic postural control in frail elderly people
# of Items	2
Evaluation	Continuous (counting number of steps)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.4
Feasibility	3.9
Overall	2.7

Psychometric Score Distribution



Feasibility Score Distribution

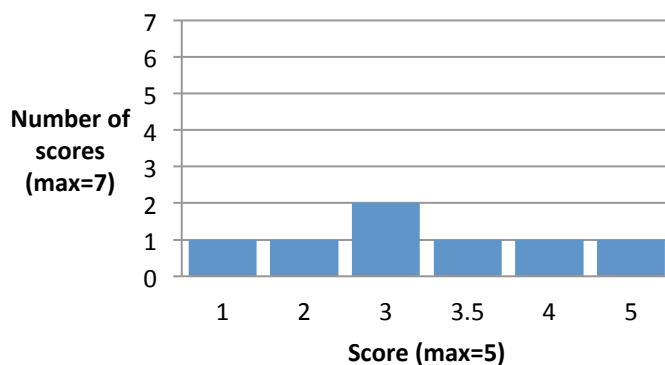


Comments from R1 Rankings: Cheap, quick, turning only, may have ceiling effect as only on frail OP ? Responsiveness • 180 degree turns with supports in place may be valuable measure to add to other balance measures for frail older adults • Limited components •

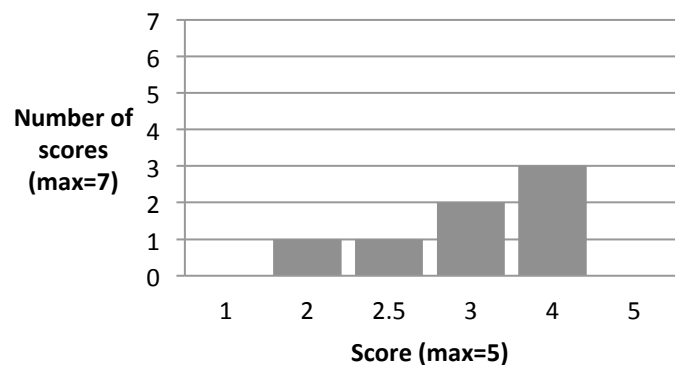
Measure ID	52
Name	Unified Balance Scale
Reference	La Porta et al. J Rehabil Med. 2011
Purpose	To be a single tool with proven measurement properties, allowing the measurement of balance “from bed to community” regardless of the etiology of the neurological lesion causing the loss of balance
# of Items	27
Evaluation	Categorical
Parameters	
# of Categories	2-5, depending on question
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.1
Feasibility	3.2
Overall	3.0

Psychometric Score Distribution



Feasibility Score Distribution

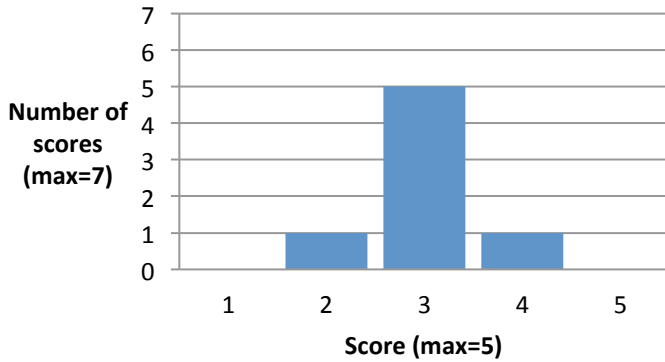


Comments from R1 Rankings: Further work needed to reduce the number of items to reduce the overall time needed to administer. But a good start on identifying the most relevant measures to be included •

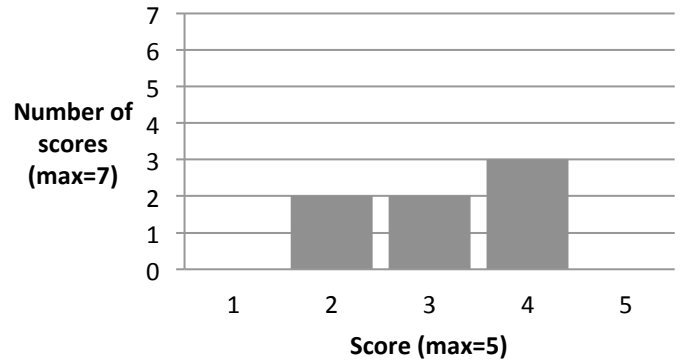
Measure ID	55
Name	High Level Mobility Assessment Tool (HiMAT)
Reference	Williams et al. Brain Inj. 2005
Purpose	To assess people with high level mobility and balance problems
# of Items	9 tasks, 13 items assessed
Evaluation	Categorical
Parameters	
# of Categories	5
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.0
Feasibility	3.1
Overall	2.0

Psychometric Score Distribution



Feasibility Score Distribution

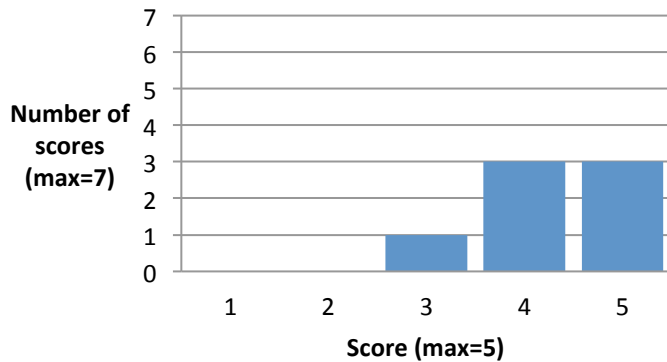


Comments from R1 Rankings: Cheap, quick but will be floor effects in less well functioning used in TBI • For use with younger adults with TBI • Not for elderly • TBI specific •

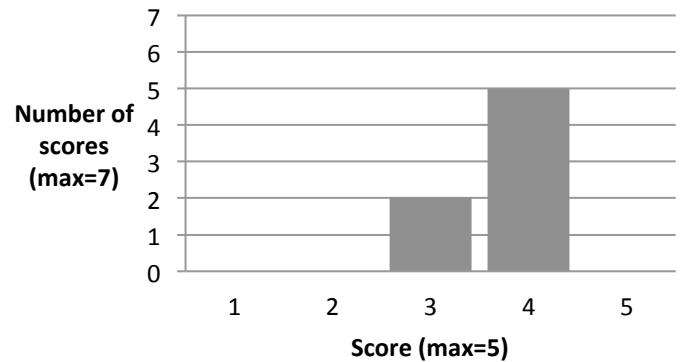
Measure ID	11
Name	Berg Balance Scale (BBS)
Reference	Berg et al. Physiotherapy Canada. 1989
Purpose	To measure balance in healthy individuals
# of Items	14
Evaluation	Categorical
Parameters	
# of Categories	5
Graded Progression	No

Mean Round 1 Results	
Psychometric	4.3
Feasibility	3.7
Overall	3.8

Psychometric Score Distribution



Feasibility Score Distribution

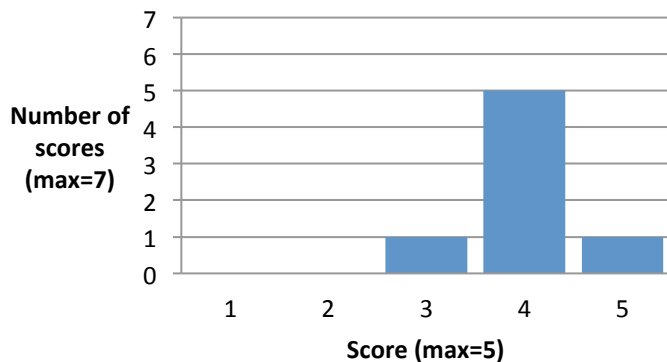


Comments from R1 Rankings: 15-20 mins makes this less feasible on large scale, used in wide variety of LTCs and trials, cheap and most physios have trained using it • BERG test needs specific training and takes time to complete • Most widely used and researched measure. Long assessment, ordinal scale, ceiling effect •

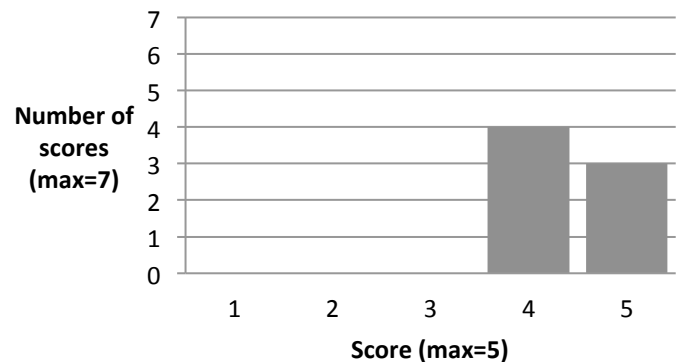
Measure ID	49
Name	Timed Up-and-Go Test (TUG)
Reference	Podsiadlo et al. J Am Geriatr Soc. 1991
Purpose	To quickly assess basic mobility skills
# of Items	1
Evaluation	Continuous (time)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	3.0
Feasibility	3.1
Overall	2.0

Psychometric Score Distribution



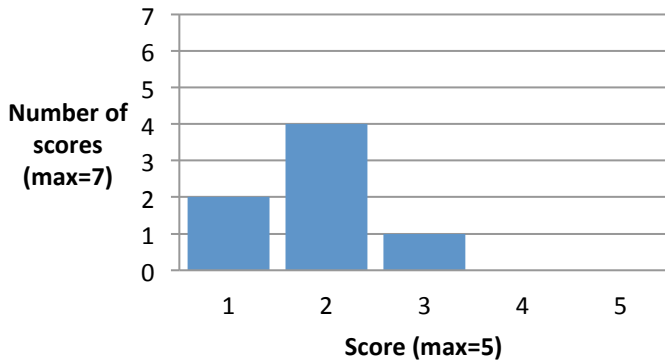
Feasibility Score Distribution



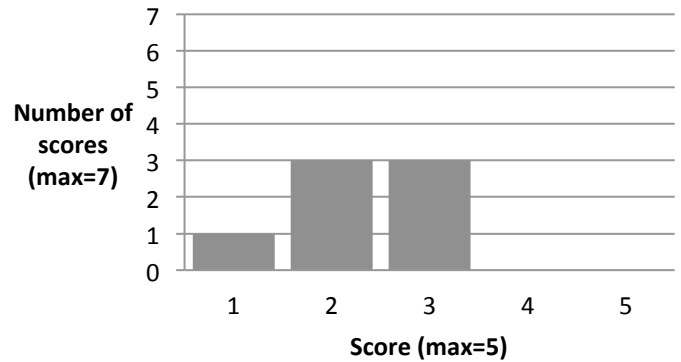
Comments from R1 Rankings: Screening tool only - inadequate measure of multiple dimensions of balance • Too short gait •

Measure ID	1	<table border="0"> <tr> <td colspan="2">Mean Round 1 Results</td> </tr> <tr> <td>Psychometric</td> <td>1.9</td> </tr> <tr> <td>Feasibility</td> <td>2.3</td> </tr> <tr> <td colspan="2">Overall 1.7</td> </tr> </table>	Mean Round 1 Results		Psychometric	1.9	Feasibility	2.3	Overall 1.7	
Mean Round 1 Results										
Psychometric	1.9									
Feasibility	2.3									
Overall 1.7										
Name	Activity-based Balance Level Evaluation (ABLE) Scale									
Reference	Ardolino et al. Phys Ther. 2012									
Purpose	To assess changes in balance across the full spectrum of recovery in the spinal cord injury population									
# of Items	28									
Evaluation	Categorical									
Parameters										
# of Categories	5									
Graded Progression	No									

Psychometric Score Distribution



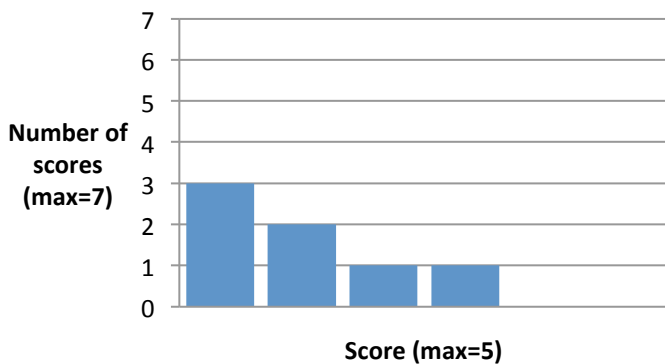
Feasibility Score Distribution



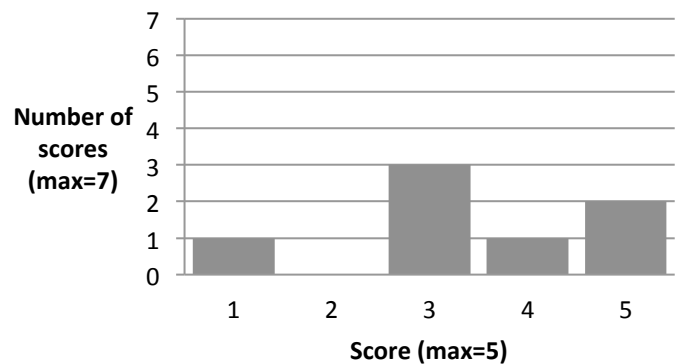
Comments from R1 Rankings: More evaluation needed • Only relevant for SCI •

Measure ID	3	<table border="0"> <tr> <td colspan="2">Mean Round 1 Results</td> </tr> <tr> <td>Psychometric</td> <td>1.9</td> </tr> <tr> <td>Feasibility</td> <td>3.4</td> </tr> <tr> <td colspan="2">Overall 2.4</td> </tr> </table>	Mean Round 1 Results		Psychometric	1.9	Feasibility	3.4	Overall 2.4	
Mean Round 1 Results										
Psychometric	1.9									
Feasibility	3.4									
Overall 2.4										
Name	Hierarchical Balance Short Forms (HBSF)									
Reference	Hou et al. Arch Phys Med Rehabil. 2011									
Purpose	To assess balance function precisely in people with stroke with limited assessment burden									
# of Items	16									
Evaluation	Continuous (binary counts transformed into continuous measure)									
Parameters										
# of Categories	N/A									
Graded Progression	Yes, within each of three categories									

Psychometric Score Distribution



Feasibility Score Distribution

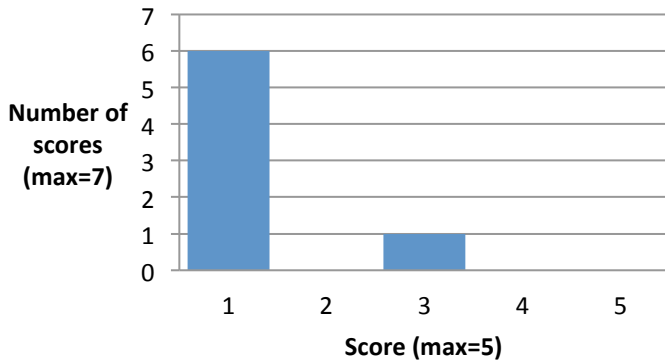


Comments from R1 Rankings: Very limited information, nothing on reliability etc and stroke specific, likely to be cheap but nothing else on time to administer • Staff may need special training to separate patients into three groups for testing • Large development sample (n=764) plus moderate sample for psychometric assessment (n=85). Contains mostly simple, non-challenging items •

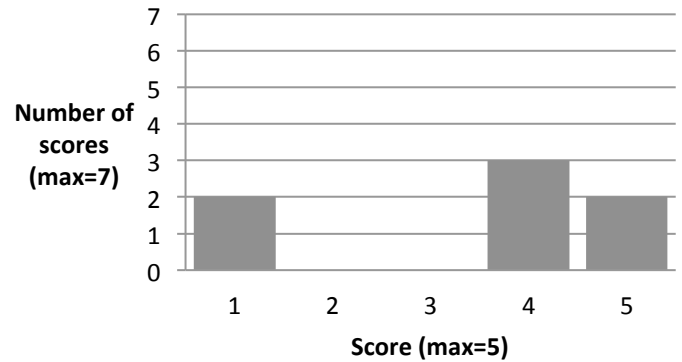
Measure ID	5
Name	Modified Balance Error Scoring System (M-BESS)
Reference	Hunt et al. Clin Journal Sport Med. 2009
Purpose	To easily administer an objective assessment tool in a cost effective way
# of Items	4
Evaluation	Continuous (number of errors)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	1.3
Feasibility	3.4
Overall	1.5

Psychometric Score Distribution



Feasibility Score Distribution

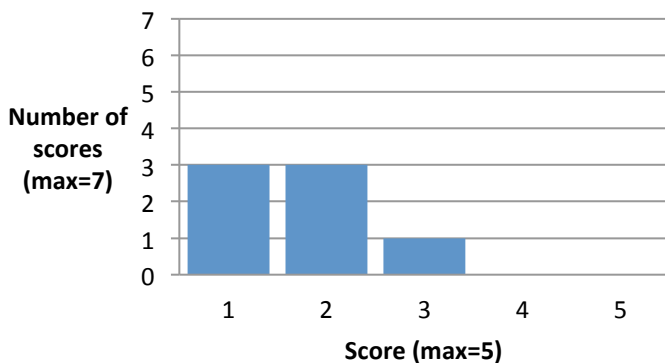


Comments from R1 Rankings: Why not MCTSIB? EO & EC • Administered to young athletes. Foam tests extend range of difficulty •

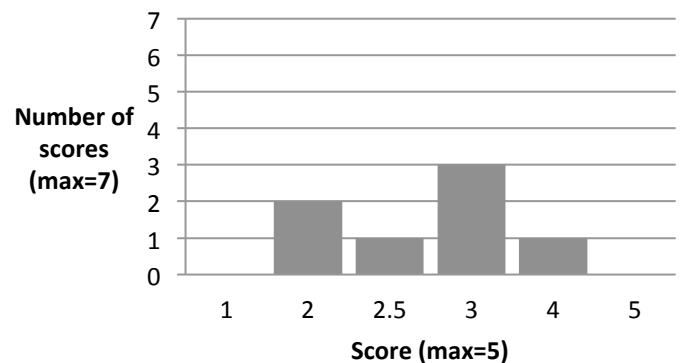
Measure ID	15
Name	Clinical Gait and Balance Scale (GABS)
Reference	Thomas et al. J Neurol Sci. 2004
Purpose	To comprehensively measure all essential elements of gait and balance
# of Items	18
Evaluation	Categorical
Parameters	
# of Categories	10 items have 5 levels, 4 items have 3 levels, 2 items have 2 levels, 2 items have subgroups with multiple categories
Graded Progression	No

Mean Round 1 Results	
Psychometric	1.7
Feasibility	2.8
Overall	1.5

Psychometric Score Distribution



Feasibility Score Distribution

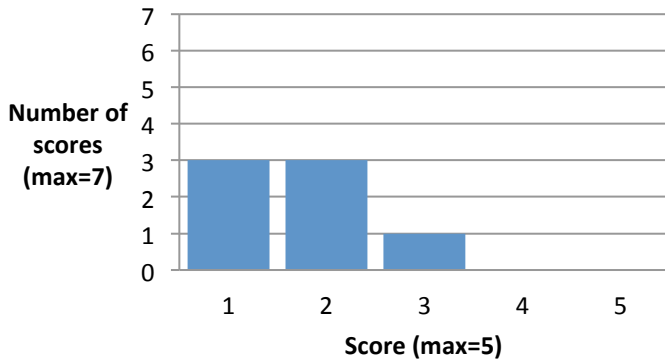


Comments from R1 Rankings: PD only (incl freezing) and limited reliability • Too many items • Cumbersome test, developed in small sample with PD •

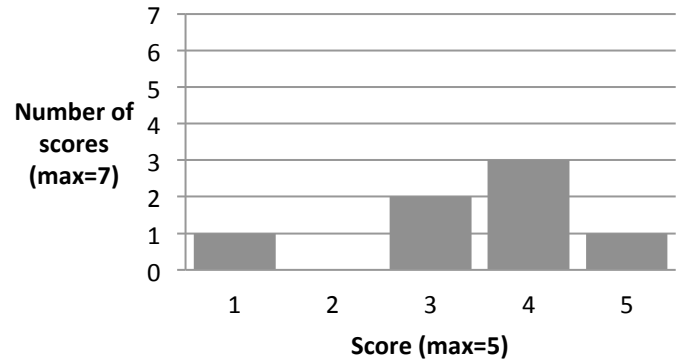
Measure ID	29
Name	Modified Figure of Eight Test
Reference	Jarnlo and Nordell. Phys Theor Pract. 2003
Purpose	To measure the ability to walk slightly in lateral direction to both sides in an eight in combination with a narrow step width
# of Items	1
Evaluation	Continuous (time and number of "oversteps")
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	1.7
Feasibility	3.4
Overall	1.8

Psychometric Score Distribution



Feasibility Score Distribution

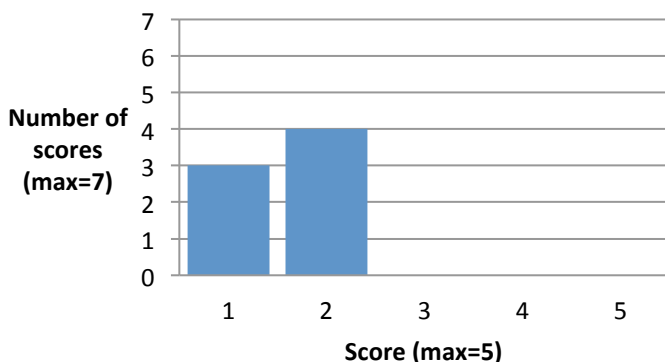


Comments from R1 Rankings: Inadequate evaluation: limited use for developing treatment plan • Nice simple performance test, which has some evidence of validity, but insufficient data on psychometric properties • One component •

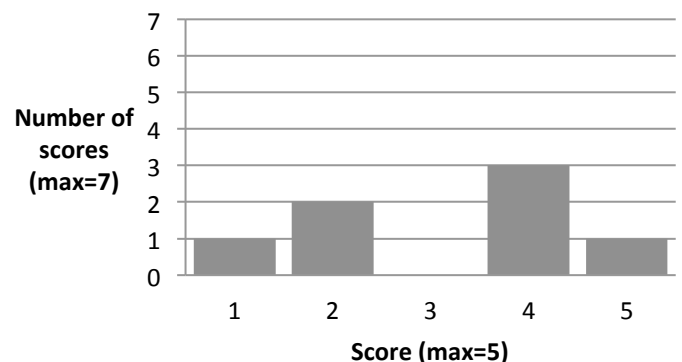
Measure ID	30
Name	Parallel Walk Test (PWT)
Reference	Johansson et al. Physi Theor Pract. 1991
Purpose	To measure dynamic balance during gait
# of Items	3
Evaluation	Continuous [time and "footfall score" (+1 when part of foot placed on line, +2 when foot falls outside line or reached for something to maintain balance)]
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	1.6
Feasibility	3.1
Overall	1.5

Psychometric Score Distribution



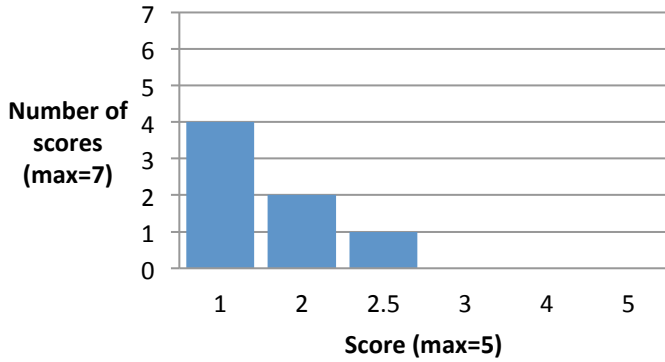
Feasibility Score Distribution



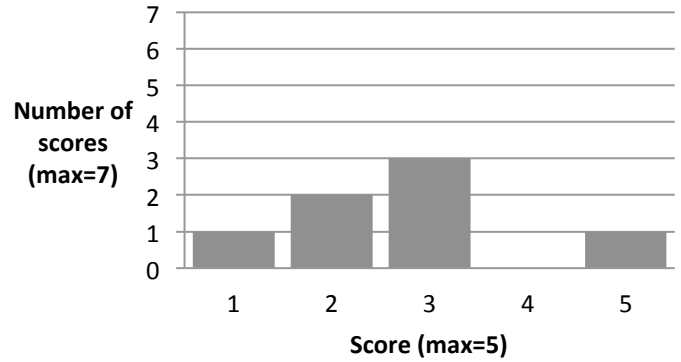
Comments from R1 Rankings: May be useful as screening tool although insufficient evaluation at this time • only in frail fallers, big range in ICCs so not sure on test-retest and will not easily show change • Insufficient data on psychometric properties • One component •

Measure ID	32	Mean Round 1 Results Psychometric 1.5 Feasibility 2.7 Overall 1.8
Name	Modified Performance Oriented Mobility Assessment	
Reference	Fox et al. Arch Phys Med Rehabil. 1996	
Purpose	To characterize recovery in physical capacity and functional independence after hip fracture	
# of Items	13	
Evaluation Parameters	Continuous (time, angle, distance, contact between thigh and abdomen)	
# of Categories	N/A	
Graded Progression	Yes for some tasks	

Psychometric Score Distribution



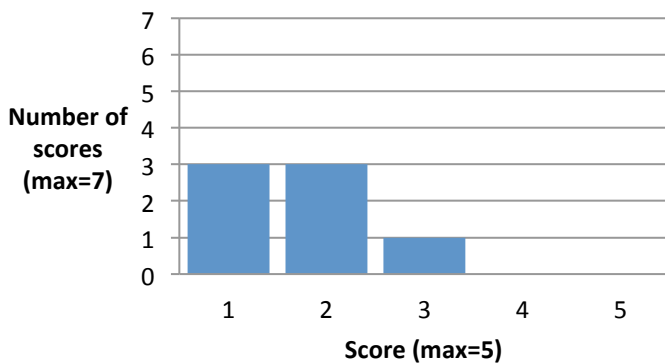
Feasibility Score Distribution



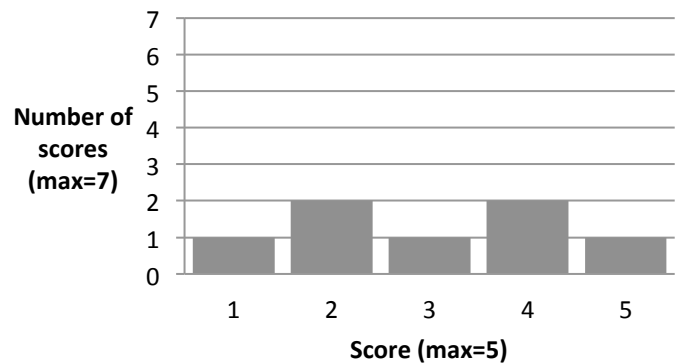
Comments from R1 Rankings: Good tool for use by trained professionals for post hip fracture patients • Insufficient data on psychometric properties • Small sample (n=23) post hip fracture •

Measure ID	37	Mean Round 1 Results Psychometric 1.7 Feasibility 3.0 Overall 2.3
Name	Rapid Step Test (RST)	
Reference	Medell et al. J Geron A Biol Sci Med Sci. 2000	
Purpose	To assess maximal and rapid stepping for balance and fall risk	
# of Items	8	
Evaluation Parameters	Continuous (step length, distance and time)	
# of Categories	N/A	
Graded Progression	No	

Psychometric Score Distribution



Feasibility Score Distribution

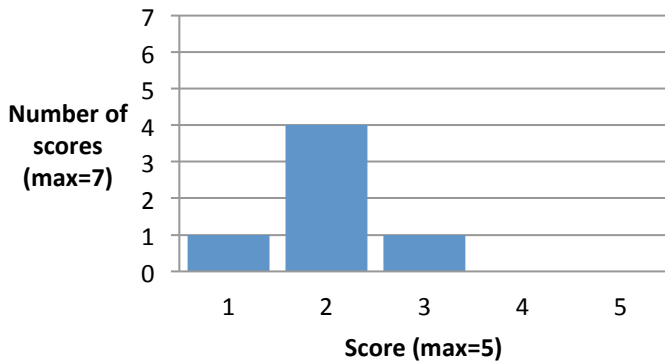


Comments from R1 Rankings: Insufficient evaluation of tool • Inadequate evidence on psychometric properties • Small study total (N=34) • See some value in this task more generally •

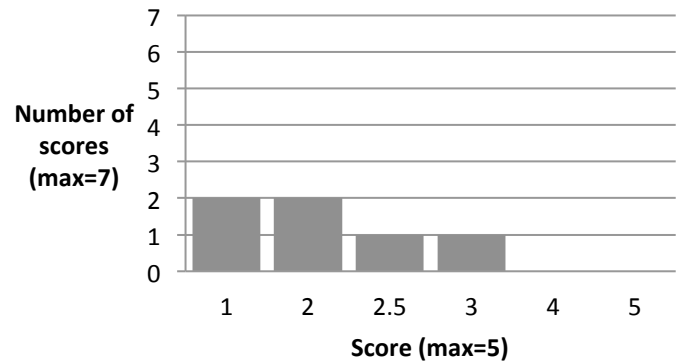
Measure ID	39
Name	Head-Shake Sensory Organization Test (HS-SOT)
Reference	Pang et al. Phys Ther. 2011
Purpose	To enhance the SOT to improve delineation of balance performance
# of Items	6
Evaluation	Continuous (equilibrium score as percentage from 0 - 100%)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.0
Feasibility	1.9
Overall	1.4

Psychometric Score Distribution



Feasibility Score Distribution

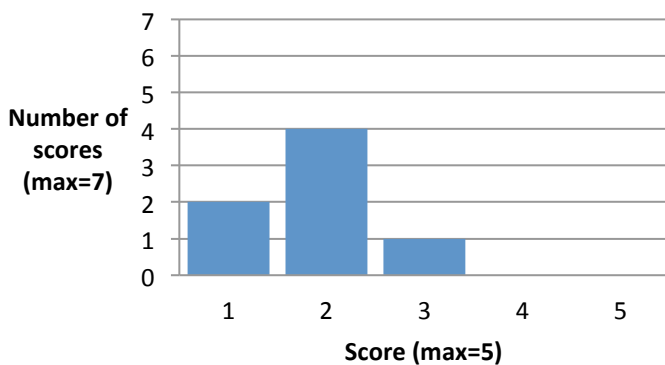


Comments from R1 Rankings: Requires expensive force equipment, limited validity, no idea how long to do • Short but of limited value • Not for all patients, poor theory •

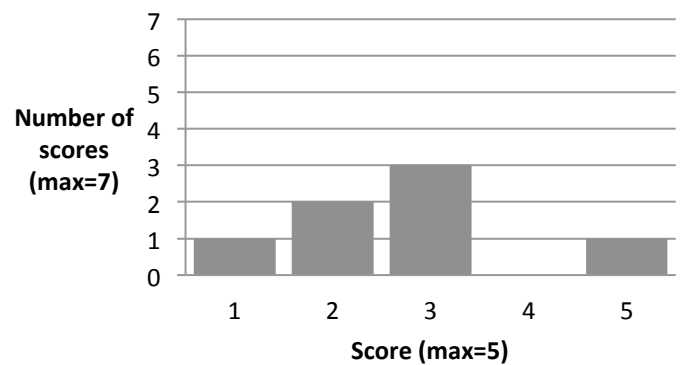
Measure ID	42
Name	Single Leg Hop Stabilization Test
Reference	Riemann et al. J Sport Rehabil. 1999
Purpose	To assess postural control during a functional performance task
# of Items	20
Evaluation	Categorical
Parameters	
# of Categories	2
Graded Progression	Yes

Mean Round 1 Results	
Psychometric	1.9
Feasibility	2.7
Overall	2.0

Psychometric Score Distribution



Feasibility Score Distribution

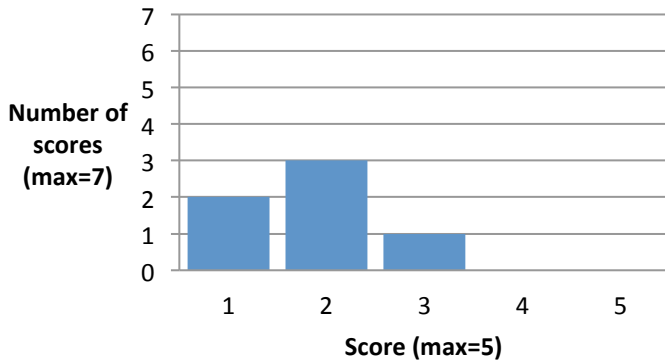


Comments from R1 Rankings: Insufficient evaluation of tool • Most OP cannot hop!, reliability tested on young people • Inadequate evidence for psychometric qualities • Impractical and dangerous •

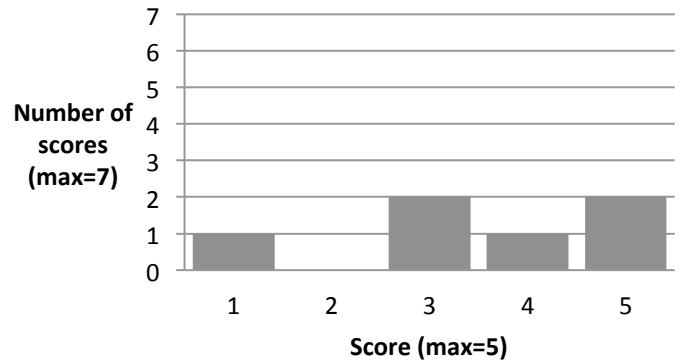
Measure ID	45
Name	Standing Test for Imbalance and Disequilibrium (SIDE)
Reference	Teranishi et al. Jap J Comp Rehabil Sci. 2010
Purpose	To classify static standing balance ability for fall prevention
# of Items	4
Evaluation	Categorical
Parameters	
# of Categories	task 1: 2, task 2: 2, task 3: 3, task 4: 2
Graded Progression	Yes

Mean Round 1 Results	
Psychometric	1.8
Feasibility	3.5
Overall	1.8

Psychometric Score Distribution



Feasibility Score Distribution

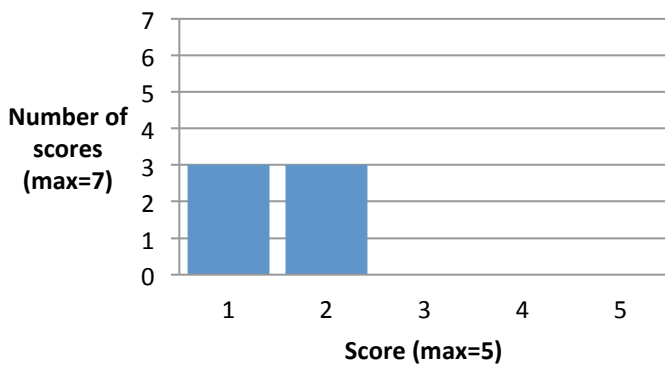


Comments from R1 Rankings: Insufficient evaluation of tool • See some value in this approach to assessment of static balance •

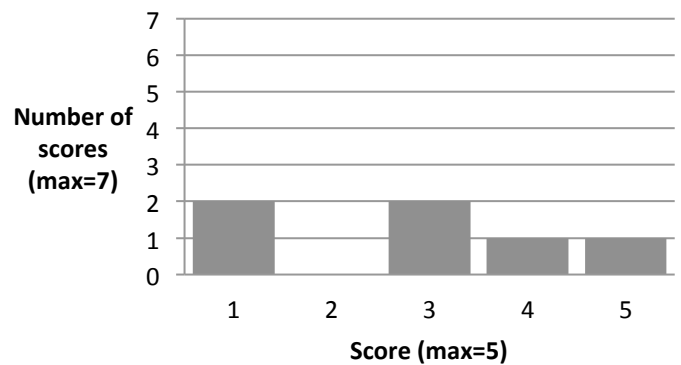
Measure ID	46
Name	Star Excursion Balance Test (SEBT)
Reference	Hertel et al. J Sport Rehabil. 2000
Purpose	To challenge the postural control systems of well-conditioned, physically active individuals recovering from lower extremity injuries
# of Items	8
Evaluation	Continuous (distance)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	1.5
Feasibility	2.8
Overall	1.4

Psychometric Score Distribution



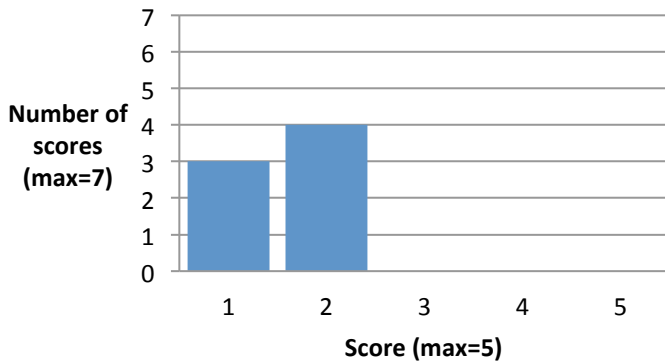
Feasibility Score Distribution



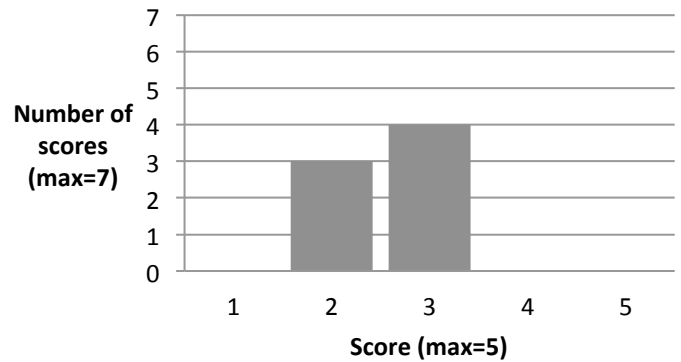
Comments from R1 Rankings: Insufficient evaluation of tool • Only suitable for young, very hard physical test, not brilliant ICCs for young people ;) •

Measure ID	53	Mean Round 1 Results
Name	Timed Up-and-Go Assessment of Biomechanical Strategies (TUG-ABS)	
Reference	Faria et al. J Rehabil Med. 2013	
Purpose	To systematically evaluate biomechanical strategies used during performance of the TUG test	
# of Items	15	
Evaluation Parameters	Categorical	
# of Categories	3	
Graded Progression	No	Psychometric 1.6
		Feasibility 2.6
		Overall 1.5

Psychometric Score Distribution



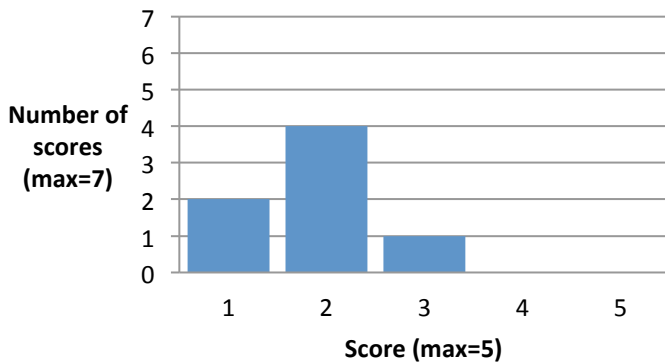
Feasibility Score Distribution



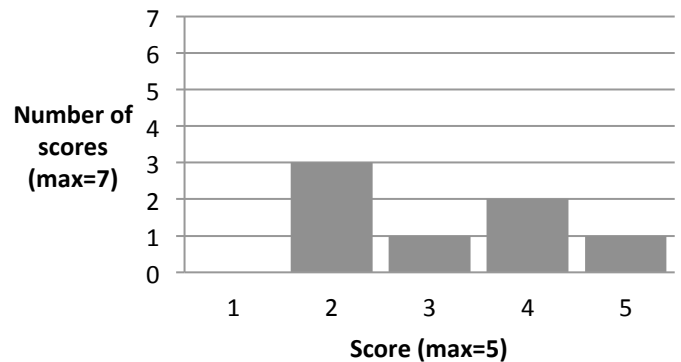
Comments from R1 Rankings: Cumbersome tool that needs much more evaluation •

Measure ID	54	Mean Round 1 Results
Name	Posture and Posture Ability Scale (PPAS)	
Reference	Rodby-Bousquet et al. Clin Rehab. 2012	
Purpose	To evaluate posture and postural ability in people with severe disabilities	
# of Items	4 tasks, 53 items assessed	
Evaluation Parameters	Categorical scale	
# of Categories	7 categories for postural ability, 2 categories for quality of posture	
Graded Progression	No	Psychometric 1.9
		Feasibility 3.1
		Overall 1.8

Psychometric Score Distribution



Feasibility Score Distribution

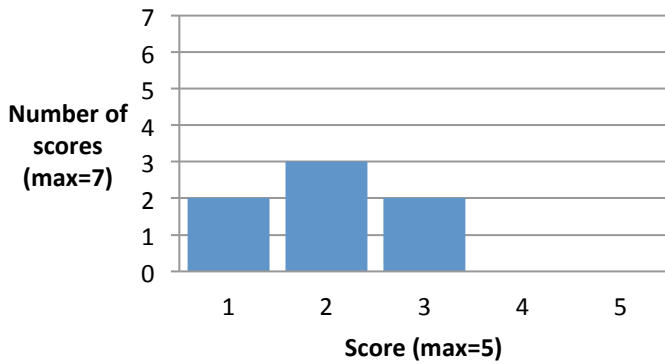


Comments from R1 Rankings: Limited use: CP; lacks psychometric rigor • CP patients, obvious ceiling effect •

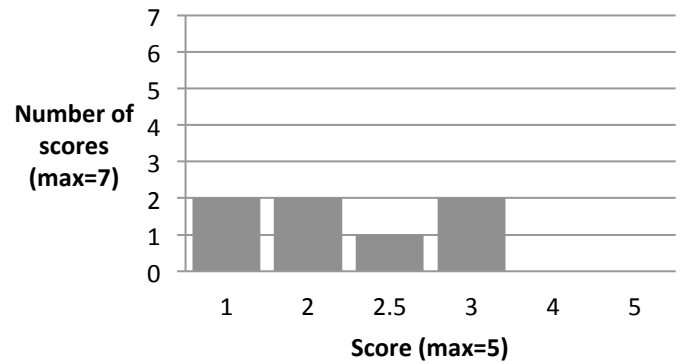
Measure ID	56
Name	Cross Step Moving on Four Spots Test (CSFT)
Reference	Yamaji & Demura Arch Phys Med Rehabil 2013
Purpose	To evaluate crossover steps in older adults
# of Items	9
Evaluation	Continuous (time to complete 9 steps)
Parameters	
# of Categories	N/A
Graded Progression	No

Mean Round 1 Results	
Psychometric	2.0
Feasibility	2.1
Overall	1.3

Psychometric Score Distribution



Feasibility Score Distribution



Comments from R1 Rankings: Requires a computer. May put those with poor balance at risk for falls during rapid stepping in changing directions • Limited •