

**Supplemental Digital Content 23: Table: Walk test protocols (n=43 Articles, 42 Studies, 44 Walk test protocols)**

First Author, Year	Track distance, Shape, Pace	Location, Equipment	No. of Trials, Rest Interval, Scoring	Position of evaluator, Qualifications, Evaluator trained	Instructions	Encouragement, Time Interval	Rest Breaks
<b>2MWT</b>							
English, 2007 <sup>21</sup>	10m, Straight, Comfortable	Indoor, Stopwatch	1 trial, N/A, Re-assessed videotaped 4wk after initial test	Behind, NR, NR	Participants were instructed to walk up and down the walkway, walking around the cones at each end, continuously for 2 min.	Yes*, phrases such as "you are doing a good job, keep going, halfway there, only 2 min to go, one min to go, etc.", Timing not structured*	Yes
Heingkaev, 2010 <sup>22</sup>	20m, Straight, Comfortable	Indoor, Stopwatch	2 trials, 5-10d, Both results were used	Behind*, Rehab Professional, NR	Participants were instructed, "Go. Keep walking until I say stop or until you are too tired, and stop when I say stop."	No*	Yes
<b>3MWT</b>							
Sakai, 2002 <sup>23</sup>	30m, Straight, Fast	Indoor, NR	2 trials, 2-5d, Both results were used	NR, NR, Yes trained	At the signal "go", participants were instructed to walk the marked distance as quickly as possible, around the far cone and back within the time limit. At the end of the 3 min, the participant advances forward to the next 5m mark.	NR	NR
<b>5MWT</b>							
da Cunha-Filho, 2002 <sup>24</sup>	5m, Straight, Fast	Indoor, Stopwatch	Assuming walk test completed once.	NR, NR, NR	Participants were instructed to walk as fast and as far as possible, back and forth over a distance of 5m.	NR	NR
da Cunha-	5m,	Indoor,	1 practice trial	Beside*,	Participants were	No*	NR

Filho, 2003 <sup>25</sup>	Straight, Comfortable	Stopwatch	& 1 walk test, 6 min, Score on single walk test	NR, NR	instructed to walk on a 5m walkway for 5 min at their usual gait velocity.		
Kobayashi, 2011 <sup>26</sup>	5m, Straight, NR	Indoor, NR	Walk test completed once	NR, NR, NR	Participants walked back and forth over a distance of 5m for 5 min.	NR	NR
<b>6MWT</b>							
Eng, 2002 <sup>161</sup>	42m, Rectangle, NR	Indoor, NR	1 practice trial and 1 walk test, 3d interval between practice and walk test, Score on single walk test	NR, NR, NR	Participants were instructed to walk as far as possible around a 42m rectangular path within the given time and not to stop unless they needed to.	NR	Yes
Kelly, 2003 <sup>27</sup>	20m, Straight, NR	Indoor, NR	2 trials, 3 hours, Maximum distance	NR, NR, NR	Participants walked from one end of the corridor to the other, covering as much distance as possible in the 6 min period.	No	NR
Eng, 2004 <sup>28</sup>	42m, Rectangle, NR	Indoor, NR	2 trials, Separate days, Both scores used No practice trial	Behind*, NR, NR	Participants were instructed to walk as far as possible around a 42m rectangular path within the given time and not to stop unless they needed to.	Yes*, as per ATS Statement	Yes
Flansbjerg, 2005 <sup>29</sup>	30m, Straight, NR	Indoor, Stopwatch	Walk test completed once.	NR Rehab Professional, NR	Participants were instructed to walk 30m between 2 marks on the floor and to cover as much ground as possible. After passing either mark, they were told to turn and walk back.	No, participants were informed when 3 min remained.	Yes
Ng, 2005 <sup>63</sup>	33m,	Indoor,	2 trials,	Behind*,	Participants were	Yes, as per the	NR

	Straight, NR	NR	1 week, Both results	NR, NR	instructed to walk up and down along a leveled 33m corridor.	ATS Statement*	
Pang, 2005 <sup>30</sup>	42m, Rectangle, NR	Indoor, NR	Assuming walk test completed once.	NR, NR, NR	Participants were instructed to cover as much distance as they can around a 42m rectangular path within 6 min and not to stop unless they needed to.	NR	Yes
Flansbjerg, 2006 <sup>31</sup>	30m, Straight, NR	Indoor, Stopwatch	2 trials, 1 week, Score from 2 <sup>nd</sup> trial	NR, NR, NR	Participants were instructed to walk 30m between 2 marks in a 2.2m wide corridor and to cover as much ground as possible. After passing either mark, they were told to turn and walk back.	No, participants were informed when 3 min remained.	Yes
Langhammer, 2006 <sup>32</sup>	85m, Straight, Fast	NR, Stopwatch	Assuming 1 walk completed at admission and discharge, Mean time at stroke unit 18d, Score on each walk test	NR, Rehab Professional, NR	Participants were encouraged to walk as fast and as long a distance as they could in 6 min.	NR	NR
Salbach, 2006 <sup>33</sup>	20m, Straight, None specified	Indoor, Stopwatch	2 trials, 30 min, Maximum distance	Slightly behind*, Research personnel, Yes*	Participants were instructed to walk back and forth, unaided if possible, along a 20m walkway, and to cover the maximum distance possible in 6 min.	Yes, Standardized phrases :“You’re doing well” and “Keep up the good work”, 30 sec	Yes
Tang, 2006 <sup>34</sup>	30m, Straight, NR	Indoor, NR	At least 1 practice trial and a single walk test trial, NR, Single walk	NR, NR, NR	Yes, as per the ATS Statement	No	NR

			test				
Yang, 2006 <sup>35</sup>	25m, Straight NR	Indoor, Counting laps/tape measure	Assuming walk test completed once.	NR, Rehab Professional, NR	Participants were instructed to walk back and forth, unaided if possible, along the 25m walkway.	NR	Yes
Liu-Ambrose, 2007 <sup>36</sup>	42m, Rectangle, NR	Indoor, NR	Assuming walk test completed once.	NR, NR, NR	Participants were instructed to walk as far as possible around a 42m rectangular path in 6 min.	NR	NR
Patterson, 2007 <sup>37</sup>	30.5m Straight, NR	Indoor, NR	Not clear – testing was performed during 7 separate visits over 4-8wks.	NR, NR, NR	Participants were instructed to cover as much distance as possible during 6 min while walking up and down a 30.5m hallway marked with orange cones.	No	NR
Carvalho, 2008 <sup>38</sup>	30m, Straight, Comfortable	Indoors & outdoors, Stopwatch	Test completed once indoors and once outdoors in a randomized order	NR, Rehab Professional, NR	Yes, as per the ATS statement.	Yes, feedback on elapsed time and standardized phrases: “you are doing well” and “keep up the good work”, 1 min	Yes
Fulk, 2008 <sup>39</sup>	46/76m <sup>§</sup> , Oval, Comfortable	Indoors, NR	2 trials, 1-3d, Scores from both walk tests Note: No practice trials*	Beside, Research Personnel & Rehab Professional, Yes	Participants were instructed to walk as far as possible for 6 min.	No	Yes
Liu, 2008 <sup>40</sup>	20m, Straight, NR	Indoor, Stopwatch	2 trials, 30 min, Maximum distance	Slightly behind*, Research personnel, Yes*	Participants were instructed to walk back and forth, unaided if possible, along a 20m walkway, and to cover the maximum distance possible in 6 min.	Yes, standardized phrases: “You’re doing well” and “Keep up the good work”, 30 sec	Yes
Muren, 2008 <sup>41</sup>	30m, Straight, Comfortable	Indoor, NR	Walk test completed once.	NR, NR, NR	NR	No	NR

Allet, 2009 <sup>42</sup>	Circumference of 50m, Circular, NR	Indoor, NR	Walk test completed once with each walking aid (total 3 aids), 1 d	NR, NR, NR	NR	NR	NR
Alzahrani, 2009 <sup>43</sup>	40m, Straight, NR	Indoor, Stopwatch	Assuming walk test completed once.	Behind, NR, NR	Yes, as per the ATS Statement.	Yes, as per the ATS Statement	Yes
Kluding, 2009 <sup>44</sup>	30.5m, Straight, NR	Indoor, Stopwatch	Assuming walk test completed once.	NR, NR, NR	Participants were instructed to cover as much ground as possible during the 6 min.	Yes, standardized phrases: "You are doing well, keep up the good work", 1 min	Yes
Mudge, 2009 <sup>45</sup>	33m*, Straight, Fast*	Indoor*, Stopwatch*	Assuming walk test completed once.	NR, NR, NR	To walk as quickly as you can for 6 min to cover as much ground as possible.*	Yes, feedback on the elapsed time and standardized phrases: 'You're doing a good job' and reporting the time elapsed, 2 min and 4 min*	Yes*
Tseng, 2009 <sup>46</sup>	30.5m, Straight, NR	Indoor, NR	Assuming walk test completed once.	Participants guarded by an evaluator, NR, NR	Participants were informed that the goal of the test was to cover as much distance as possible during 6 min.	Yes, standardized phrases, 1 min	NR
Fulk, 2010 <sup>47</sup>	~30m* in circumference, Oval, NR	Indoor, Stopwatch	Assuming walk test completed once.	NR, Rehab Professional, NR	Participants were instructed to walk as far as possible for 6 min around an oval course approximately 30m in circumference.	No	Yes
Ng, 2010 <sup>48</sup>	33m, Straight, NR	Indoor, NR	Assuming walk test completed	NR, NR, NR	Participants were instructed to walk back and forth along a level 33m	NR	NR

			once		corridor.		
Rand, 2010 <sup>49</sup>	30m, Straight, NR	Indoor, Stopwatch	Assuming walk test completed once	NR, NR, NR	NR  Participants were instructed to walk as far as possible during 6 min on a 30m long walking course.	Yes- feedback on elapsed time and standardized phrases, 1 min	Yes
Calmels, 2011 <sup>50</sup>	70m, Straight, Comfortable	Indoor, NR	1 walk test at pre- and post- training, 2 months, Score on each walk test	NR, NR, NR	NR	NR	NR
Ng, 2011 <sup>51</sup>	10m, 20m, 30m, Straight, Comfortable	Indoor, NR	1 trial at each condition (total of 6 trials), 2 conditions/day with a 20 min rest, all tests were completed within 3d	Behind, NR, NR	Yes, participants were instructed to walk from one mark to the other, covering as many laps as possible at their own walking pace during the allotted 6 min. Each participant performed the 6MWT under 6 conditions: <ol style="list-style-type: none"> <li>1) Turning to the affected side, with a 10m walkway</li> <li>2) Turning to the affected side, with a 20m walkway</li> <li>3) Turing to the affected side, with a 30m walkway</li> <li>4) Turning to the unaffected side, with a 10m walkway</li> <li>5) Turning to the unaffected side, with a 20m walkway</li> <li>6) Turning to the</li> </ol>	Yes, standardized phrases: "You're doing a good job", "You're halfway done", "You have 1 minute to go", 1, 3, 5 min	Yes

					unaffected side, with a 30m walkway		
Ovando, 2011 <sup>52</sup>	30m, Straight, NR	Indoor, NR	Assuming walk test completed once.	NR, Rehab Professional, NR	Participants were asked to walk from one end to the other of a 30m long corridor walking the longest distance possible in 6 min.	NR	NR
Severinsen, 2011 <sup>53</sup>	30m, Straight, NR	Indoor, Stopwatch & lap counter	Assuming test completed once.	Starting line, Rehab Professional, training physiologist & physician, NR	Yes, as per the ATS Statement.	Yes, as per the ATS Statement	Yes
Wevers, 2011 <sup>54</sup>	30m, Straight, Comfortable	Outdoors, GPS/MW	2 trials, Maximum of 5d, Both results used No practice trial*	Behind, NR, Yes	Participants received standardized instructions to walk as far as possible at their comfortable pace for 6 min. Running was not allowed.	Yes, standardized phrases: "You're doing well" and "Keep up the good work", 1 min	NR
Zalewski, 2011 <sup>55</sup>	200m, outside lane of a track, NR	Indoor track, NR	Assuming walk test completed once.	NR, NR, NR	NR	NR	NR
Danielsson, 2012 <sup>56</sup>	30m, Straight, Comfortable	Indoor, NR	Two trials, 10min rest/ return to baseline HR, Maximum distance	NR, NR, NR	Participants were instructed to walk at a self- selected speed round a cone at each end of the 30m walkway and to cover as much distance as possible in 6 min.	NR	NR
Ng, 2012 <sup>57</sup>	33m, Straight, Comfortable	Indoor, NR	Assuming walk test completed once.	Behind, NR, NR	NR	Yes, standardized phrases: "You're doing a good job", You're halfway done"	Yes

						and "You have 1 minute to go", 1, 3 and 5 min	
Schmid, 2012 <sup>58</sup>	30m, NR-assume straight, NR	Indoor, NR	Walk test completed once	NR, Research Personnel, Yes	NR	NR	NR
Brogardh, 2012 <sup>59</sup>	30.5m, Straight, Comfortable	Indoor, NR	Walk test completed once	NR, Rehab Professional, NR	Participants were instructed to walk from end to end at their own pace while attempting to cover as much ground as possible in the allotted 6 min.	Yes, 30s	Yes
Salbach, 2013 <sup>62</sup>	30m, Straight, NR	Indoor, Stopwatch	Two trials, ≥20 min rest, Maximum distance	NR, Rehab Professional, Yes	As per the ATS Statement	As per the ATS Statement	Yes
<b>12MWT</b>							
Eng, 2002 <sup>†61</sup>	42m, Rectangle, NR	Indoor, NR	1 practice and 1 walk test, 3d interval between practice and walk test, Score on single walk test	NR, NR, NR	Participants were instructed to walk as far as possible around a 42m rectangular path within the given time and not to stop unless they needed to.	NR	Yes
Kosak, 2005 <sup>60</sup>	122m, Rectangle, Comfortable	Indoor, Linear scale marked on floor	At least 4 trials, 1d between the first 3 trials and weekly thereafter, Score on each walk test	NR (assistance was provided for balance, weight-shift and leg advancement as needed), Research Personnel, NR	Participants were instructed to walk at their comfortable walking speed.	NR	Yes



Abbreviations (in alphabetical order): A-AFO, Anterior ankle-foot orthosis; Days; HR, Heart Rate; m, meters; min, Minutes; No., number; NR, Not Reported; sec, Seconds; wk, Weeks; 2MWT, 2-minute walk test; 3MWT, 3-minute walk test; 5MWT, 5-minute walk test; 6MWT, 6-minute walk test; 12MWT, 12-minute walk test.

\*Data obtained from author.

†Study examines both the 6MWT and 12MWT.

‡These three articles present analyses of data from one study.

§Calculated from study data.