Activity monitor	Steps detected by activity monitor / observed step count (%)												Mean steps detected: % (SD)
Fitbit Flex													
No gait aid (N=10)	46/183 (25%)	0/145 (0%)	61/146 (42%)	257/242 (106%)	169/199 (85%)	0/159 (0%)	35/172 (20%)	117/206 (57%)	66/178 (37%)	0/185 (0%)			42% (35%)
With gait aid (N=10)	0/151 (0%)	0/107 (0%)	86/182 (47%)	0/91 (0%)	0/69 (0%)	0/138 (0%)	0/132 (0%)	0/207 (0%)	9/95 (9%)	70/149 (47%)			3% (18%)
Total (N=20)													24% (34%)
Jawbone Up Move													
No gait aid (N=8)	0/177 (0%)	0/169 (0%)	192/216 (89%)	238/235 (101%)	0/104 (0%)	214/214 (100%)	0/200 (0%)	114/228 (50%)					43% (52%)
With gait aid (N=12)	0/119 (0%)	0/117 (0%)	0/162 (0%)	0/100 (0%)	0/180 (0%)	0/122 (0%)	0/124 (0%)	0/164 (0%)	0/113 (0%)	0/158 (0%)	0/132 (0%)	0/164 (0%)	0% (0%)
Total (N=20)													17% (40%)

Supplementary Table S2: Percentage of steps detected – thigh position

Activity monitor	Steps detected by activity monitor / observed step count (%)										Mean steps detected: % (SD)
Fitbit Flex											
Test 1-10	0/119 (0%)	0/117 (0%)	176/177 (99%)	214/216 (99%)	139/162 (86%)	91/100 (91%)	236/235 (100%)	158/180 (88%)	0/104 (0%)	101/214 (47%)	
Test 11-19	122/122 (100%)	189/200 (95%)	36/124 (29%)	157/164 (96%)	223/228 (98%)	0/113 (0%)	151/158 (96%)	23/132 (17%)	85/164 (52%)		
Total (N=19)											66% (42%)
Jawbone Up Move											
Test 1-10	154/183 (84%)	69/151 (46%)	0/107 (0%)	0/182 (0%)	124/145 (21%)	0/146 (0%)	0/91 (0%)	0/69 (0%)	0/138 (0%)	0/199 (0%)	
Test 11-19	0/159 (0%)	0/172 (0%)	0/206 (0%)	129/178 (72%)	0/132 (0%)	50/207 (24%)	0/95 (0%)	0/185 (0%)	149/149 (100%)		
Total (N=19)											22% (35%)
ActivPAL3											
Test 1-10	194/199 (97%)	114/122 (93%)	24/159 (15%)	196/200 (98%)	146/172 (85%)	86/124 (69%)	202/206 (98%)	148/164 (90%)	178/178 (100%)	222/228 (97%)	
Test 11-17	112/132 (85%)	200/207 (97%)	140/158 (89%)	92/96 (96%)	84/132 (64%)	160/185 (86%)	130/149 (87%)				
Total (N=17)											85% (27%)