

Supplementary Information

Supplementary Table S1. Description of the 24 digital mobility outcomes (DMOs).

DMO	Definition	Unit
Walking activity		
<i>Amount</i>		
Walking duration	Weekly mean of time spent walking per day	min/day
Number of steps	Weekly mean of the number of steps per day	steps/day
<i>Pattern</i>		
Number of WBs (n)	Weekly mean of the sum of walking bouts per day	WBs/day
Number of WBs >10s	Weekly mean of the sum of walking bouts per day including bouts longer than 10 seconds	WBs/day
Number of WBs >30s	Weekly mean of the sum of walking bouts per day including bouts longer than 30 seconds	WBs/day
Number of WBs >60s	Weekly mean of the sum of walking bouts per day including bouts longer than 60 seconds	WBs/day
WB duration	Weekly mean of the daily mean of walking bout duration	s
P90 WB duration	Weekly mean of the daily 90th percentile of walking bout duration	s
WB duration bout to bout variability	Weekly mean of the daily bout to bout variability of walking bout duration	%
Gait		
<i>Pace</i>		
Walking speed in shorter (10-30s) WBs	Weekly mean of the daily average walking speed, assessed in walking bouts between 10 and 30 seconds	m/s
Walking speed in longer (>30s) WB	Weekly mean of the daily average walking speed, assessed in walking bouts longer than 30 seconds	m/s
P90 walking speed in WBs >10s	Weekly mean of the daily 90th percentile of the walking speed, assessed in walking bouts of more than 10 seconds	m/s
P90 walking speed in longer (>30s) WBs	Weekly mean of the daily 90th percentile of the walking speed, assessed in walking bouts of longer than 30 seconds	m/s
Stride length in shorter (10-30s) WBs	Weekly mean of the daily length of two consecutive steps, assessed during walking bouts between 10 and 30 seconds	cm
Stride length in longer (>30s) WBs	Weekly mean of the daily average length of two consecutive steps, assessed during walking bouts longer than 30 seconds	cm
<i>Rhythm</i>		
Cadence in all WBs	Weekly mean of the daily average of the steps frequency during a period of time (minutes), calculated in all walking bouts	steps/min
Cadence in longer (>30s) WBs	Weekly mean of the daily average of the steps frequency during a period of time (minutes), calculated in walking bouts longer than 30 seconds	steps/min
P90 cadence in longer (>30s) WBs	Weekly mean of the daily 90th percentile of the steps frequency during a period of time (minutes), calculated in walking bouts longer than 30 seconds	steps/min
Stride duration in all WBs	Weekly mean of the daily average of the time elapsed between the initial contacts of two consecutive footfalls of the same foot, assessed in all walking bouts	s
Stride duration in longer (>30s) WBs	Weekly mean of the daily average of the time elapsed between the initial contacts of two consecutive footfalls of the same foot, assessed in walking bouts longer than 30 seconds	s
<i>Bout-to-bout variability</i>		
Walking speed bout-to-bout variability in longer (>30s) WBs	Weekly mean of the daily bout-to-bout variability of walking speed, assessed in walking bouts longer than 30 seconds	%
Stride length bout-to-bout variability in longer (>30s) WBs	Weekly mean of the daily bout-to-bout variability of stride length, assessed in walking bouts longer than 30 seconds	%
Cadence bout-to-bout variability	Weekly mean of the daily bout-to-bout variability of cadence, assessed in all walking bouts	%
Stride duration bout-to-bout variability	Weekly mean of the daily bout-to-bout variability of stride duration, assessed in all walking bouts	%

Supplementary Table S2. Expected correlation coefficient ranges between DMOs and related constructs in **non-acute** patients, derived from previous research, pilot testing, and expert consultation.

DMO	Convergent						
	TUG	SPPB total	4m gait speed	6MinWT Distance	LLFDI-FC	Short FES-I	FACIT-F
Walking activity							
<i>Amount</i>							
Walking duration (min/day)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
Number of steps (steps/day)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
<i>Pattern</i>							
Number of WBs (n)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
Number of WBs >10s (n)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
Number of WBs >30s (n)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
Number of WBs >60s (n)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
WB duration (s)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
P90 WB duration (s)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
WB duration bout to bout variability (%)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
Gait							
<i>Pace</i>							
Walking speed in shorter (10-30s) WBs (m/s)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	-0.3 to -0.4	0.3 to 0.4
Walking speed in longer (>30s) WBs (m/s)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	-0.3 to -0.4	0.3 to 0.4
P90 walking speed in WBs >10s (m/s)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
P90 walking speed in longer (>30s) WBs (m/s)	-0.6 to -0.9	0.6 to 0.9	0.6 to 0.9	0.6 to 0.9	0.4 to 0.6	-0.4 to -0.6	0.3 to 0.4
Stride length in shorter (10-30s) WBs (cm)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	-0.3 to -0.4	0.3 to 0.4
Stride length in longer (>30s) WBs (cm)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	-0.3 to -0.4	0.3 to 0.4
<i>Rhythm</i>							
Cadence in all WBs (steps/min)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Cadence in longer (>30s) WBs (steps/min)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
P90 cadence in longer (>30s) WBs (steps/min)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride duration in all WBs (s)	0.4 to 0.6	-0.4 to -0.6	-0.4 to -0.6	-0.4 to -0.6	-0.3 to -0.4	0.3 to 0.4	-0.3 to -0.4
Stride duration in longer (>30s) WBs (s)	0.4 to 0.6	-0.4 to -0.6	-0.4 to -0.6	-0.4 to -0.6	-0.3 to -0.4	0.3 to 0.4	-0.3 to -0.4
<i>Bout-to-bout variability</i>							
Walking speed bout-to-bout variability in longer (>30s) WBs (%)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride length bout-to-bout variability in longer (>30s) WBs (%)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Cadence bout-to-bout variability (%)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride duration bout-to-bout variability (%)	-0.4 to -0.6	0.4 to 0.6	0.4 to 0.6	0.4 to 0.6	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4

DMO Digital Mobility Outcome; TUG Timed Up and Go test; SPPB Short Physical Performance Battery; 4m gait speed Gait speed from the SPPB supervised 4-meter walk test; 6MinWT 6-Minute Walking Test; LLFDI-FC Late Life Function and Disability Instrument – Functional Component; Short FES-I Short Falls Efficacy Scale International; FACIT-F Functional Assessment of Chronic Illness Therapy Fatigue Scale; WBs Walking Bouts.

Supplementary Table S3. Expected correlation coefficient ranges between DMOs and related constructs in **acute** patients, derived from previous research, pilot testing, and expert consultation.

DMO	Convergent			
	SPPB total	4m gait speed	Short FES-I	FACIT-F
Walking activity				
<i>Amount</i>				
Walking duration (min/day)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Number of steps (steps/day)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
<i>Pattern</i>				
Number of WBs (n)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Number of WBs >10s (n)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Number of WBs >30s (n)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Number of WBs >60s (n)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
WB duration (s)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
P90 WB duration (s)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
WB duration bout to bout variability (%)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Gait				
<i>Pace</i>				
Walking speed in shorter (10-30s) WBs (m/s)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Walking speed in longer (>30s) WBs (m/s)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
P90 walking speed in WBs >10s (m/s)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
P90 walking speed in longer (>30s) WBs (m/s)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride length in shorter (10-30s) WBs (cm)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride length in longer (>30s) WBs (cm)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
<i>Rhythm</i>				
Cadence in all WBs (steps/min)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Cadence in longer (>30s) WBs (steps/min)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
P90 cadence in longer (>30s) WBs (steps/min)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride duration in all WBs (s)	-0.3 to -0.4	-0.3 to -0.4	0.3 to 0.4	-0.3 to -0.4
Stride duration in longer (>30s) WBs (s)	-0.3 to -0.4	-0.3 to -0.4	0.3 to 0.4	-0.3 to -0.4
<i>Bout-to-bout variability</i>				
Walking speed bout-to-bout variability in longer (>30s) WBs (%)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride length bout-to-bout variability in longer (>30s) WBs (%)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Cadence bout-to-bout variability (%)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4
Stride duration bout-to-bout variability (%)	0.3 to 0.4	0.3 to 0.4	-0.3 to -0.4	0.3 to 0.4

DMO Digital Mobility Outcome; SPPB Short Physical Performance Battery; 4m gait speed Gait speed from the SPPB supervised 4-meter walk test; Short FES-I Short Falls Efficacy Scale International; FACIT-F Functional Assessment of Chronic Illness Therapy Fatigue Scale; WBs Walking Bouts.

Supplementary Table S4. Comparison of sociodemographic and clinical characteristics between included and excluded participants after PFF surgery.

	Excluded n = 62 (11%)	Included n = 505 (89%)	p-value
Sociodemographic characteristics			
Age, mean (SD)	77.2 (10.6)	77.6 (9.4)	0.717
Gender, female, n (%)	42 (69%)	333 (66%)	0.662
Marital status, married, n (%)	26 (43%)	246 (49%)	0.657
Education less than high school (<10 yrs) / others, n (%)	34 (55%)	320 (63%)	0.663
Recruitment site, n (%)			<0.001
<i>Montpellier</i>	23 (37%)	39 (8%)	
<i>Trondheim / Oslo</i>	24 (39%)	238 (47%)	
<i>Stuttgart / Heidelberg</i>	15 (25%)	228 (45%)	
Fracture Type, n (%)			1
<i>Femoral neck fracture</i>	42 (69%)	348 (69%)	
<i>Extracapsular fracture</i>	19 (31%)	157 (31%)	
Days since surgery, median (p25-p75)	62 (5 - 201)	60 (23 - 140)	0.768
Functional Comorbidity Index [0-18], mean (SD)	3.3 (3.0)	3.3 (2.1)	0.411
Walking Aids, n (%)			0.002
<i>Indoor</i>	17 (39%)	253 (62%)	0.003
<i>Outdoor</i>	28 (64%)	301 (74%)	0.144
Recovery Phase, n (%)			0.002
<i>Acute</i>	18 (29%)	100 (20%)	
<i>Post Acute</i>	10 (16%)	117 (23%)	
<i>Extended Recovery</i>	13 (21%)	201 (40%)	
<i>Long Term Recovery</i>	21 (34%)	87 (17%)	
Clinical characteristics			
TUG in s, mean (SD)	23.7 (17.8)	19.8 (12.3)	0.441
SPPB			
<i>Total score [0-12], mean (SD)</i>	5.6 (3.7)	6.2 (3.1)	0.057
<i>Gait speed (m/s), mean (SD)</i>	0.70 (0.50)	0.70 (0.40)	0.319
6MinWT Distance (m), mean (SD)	278.4 (149.9)	283.6 (125.9)	0.777
LLFDI-FC [0-100], median (p25-p75)	56 (42 - 62)	49 (42 - 59)	0.167
Short FES-I [7-28], median (p25-p75)	8 (7 - 14)	10 (7 - 14)	0.257
FACIT-F [0-52], median (p25-p75)	41 (32 - 47)	40 (31 - 45)	0.468
Hearing Impairment [2-8], mean (SD)	3.2 (1.4)	2.9 (1.2)	0.043
Arterial hypertension [>140 mm Hg systolic BP], n (%)	21 (34%)	185 (37%)	0.688

Fracture Type: 1 participant with missing data; *Walking Aids* Acute patients were not included in the analysis as the pre-fracture walking aid usage was assessed. *TUG* Timed Up and Go test; *SPPB* Short Physical Performance Battery; *4m gait speed* Gait speed from the SPPB supervised 4-meter walk test. *6MinWT* 6-Minute Walking Test; *LLFDI-FC* Late Life Function and Disability Instrument – Functional Component; *Short FES-I* Short Falls Efficacy Scale International; *FACIT-F* Functional Assessment of Chronic Illness Therapy Fatigue Scale; *BP* Blood Pressure; *TUG*, 5-time chair rise as part of *SPPB*, *6MinWT* and *LLFDI* Not performed in acute patients.

Supplementary Table S5. Distribution and convergent and divergent validity (correlation coefficients with corresponding 95% CIs) of DMOs in 100 **acute** patients assessed ≤14 days after PFF surgery. Coefficients in bold represent those that matched or exceeded expected values, while coefficients in non-bold represent those that did not match the expected values. Divergent validity coefficients are shown in grey as the sample size was too small.

DMO	Mean (SD) or median (p25 - p75)	Convergent				Divergent	
		SPPB total	4m gait speed	Short FES-I	FACIT-F	Hearing Impairment	Systolic BP
Walking activity							
<i>Amount</i>							
Walking duration (min/day)	7 (3 - 14)	0.39 (0.20, 0.57)	0.39 (0.22, 0.55)	-0.08 (-0.27, 0.13)	0.26 (0.07, 0.44)	-0.02 (-0.25, 0.18)	0.10 (-0.12, 0.32)
Number of steps (steps/day)	519 (241-1069)	0.40 (0.18, 0.57)	0.39 (0.20, 0.54)	-0.08 (-0.29, 0.10)	0.27 (0.08, 0.43)	-0.02 (-0.24, 0.2)	0.11 (-0.12, 0.32)
<i>Pattern</i>							
Number of WBs (n)	57 (59)	0.41 (0.21, 0.59)	0.43 (0.26, 0.58)	-0.14 (-0.31, 0.07)	0.28 (0.08, 0.44)	-0.06 (-0.26, 0.16)	0.11 (-0.13, 0.35)
Number of WBs >10s (n)	12 (6 - 26)	0.36 (0.16, 0.54)	0.35 (0.16, 0.50)	-0.06 (-0.26, 0.15)	0.25 (0.04, 0.41)	-0.02 (-0.21, 0.20)	0.08 (-0.16, 0.31)
Number of WBs >30s (n)	1 (0 - 4)	0.28 (0.04, 0.46)	0.24 (0.05, 0.43)	0.06 (-0.15, 0.28)	0.12 (-0.07, 0.31)	0.03 (-0.18, 0.24)	0.11 (-0.14, 0.32)
Number of WBs >60s (n)	0 (0 - 1)	0.24 (0.03, 0.43)	0.20 (-0.01, 0.39)	0.04 (-0.20, 0.27)	0.09 (-0.11, 0.27)	0.01 (-0.19, 0.23)	0.11 (-0.17, 0.30)
WB duration (s)	7.4 (6.6 - 8.3)	0.04 (-0.15, 0.25)	0.01 (-0.18, 0.22)	0.26 (0.05, 0.47)	-0.02 (-0.21, 0.21)	0.13 (-0.05, 0.32)	0.00 (-0.21, 0.21)
P90 WB duration (s)	16.8 (12.7 - 22.8)	0.13 (-0.09, 0.31)	0.14 (-0.05, 0.32)	0.17 (-0.06, 0.38)	0.03 (-0.15, 0.21)	0.10 (-0.11, 0.30)	0.03 (-0.18, 0.25)
WB duration bout to bout variability (%)	67 (53 - 81)	0.24 (0.05, 0.42)	0.22 (0.04, 0.40)	0.02 (-0.21, 0.22)	0.11 (-0.07, 0.28)	0.00 (-0.19, 0.20)	-0.02 (-0.22, 0.21)
Gait							
<i>Pace</i>							
Walking speed in shorter (10-30s) WBs (m/s)	0.55 (0.08)	0.07 (-0.16, 0.26)	0.07 (-0.13, 0.29)	-0.13 (-0.33, 0.06)	0.10 (-0.11, 0.31)	0.06 (-0.14, 0.27)	-0.18 (-0.36, 0.05)
Walking speed in longer (>30s) WBs (m/s)	0.56 (0.09)	0.31 (0.07, 0.52)	0.30 (0.08, 0.49)	-0.28 (-0.50, -0.05)	0.19 (-0.04, 0.41)	-0.04 (-0.25, 0.18)	-0.03 (-0.28, 0.21)
P90 walking speed in WBs >10s (m/s)	0.62 (0.10)	0.15 (-0.05, 0.37)	0.13 (-0.09, 0.32)	-0.13 (-0.31, 0.07)	0.13 (-0.07, 0.31)	0.07 (-0.12, 0.27)	-0.17 (-0.38, 0.06)
P90 walking speed in longer (>30s) WBs (m/s)	0.61 (0.10)	0.26 (0.03, 0.48)	0.29 (0.05, 0.48)	-0.24 (-0.44, -0.01)	0.13 (-0.10, 0.34)	-0.03 (-0.25, 0.19)	0.02 (-0.22, 0.27)
Stride length in shorter (10-30s) WBs (cm)	83 (11)	0.18 (-0.06, 0.37)	0.17 (-0.04, 0.37)	-0.12 (-0.33, 0.10)	0.13 (-0.07, 0.31)	0.01 (-0.19, 0.20)	-0.30 (-0.52, -0.06)
Stride length in longer (>30s) WBs (cm)	86 (12)	0.33 (0.11, 0.52)	0.41 (0.21, 0.59)	-0.29 (-0.50, -0.06)	0.23 (0.02, 0.46)	-0.05 (-0.26, 0.18)	-0.08 (-0.30, 0.18)
<i>Rhythm</i>							
Cadence in all WBs (steps/min)	81 (5)	-0.13 (-0.32, 0.10)	-0.08 (-0.28, 0.14)	-0.12 (-0.36, 0.10)	-0.01 (-0.21, 0.18)	0.11 (-0.11, 0.30)	0.11 (-0.10, 0.33)
Cadence in longer (>30s) WBs (steps/min)	78 (7)	0.07 (-0.16, 0.30)	0.00 (-0.23, 0.24)	-0.14 (-0.37, 0.10)	0.04 (-0.18, 0.26)	0.03 (-0.19, 0.27)	0.16 (-0.08, 0.36)
P90 cadence in longer (>30s) WBs (steps/min)	82 (8)	0.12 (-0.12, 0.33)	0.08 (-0.15, 0.31)	-0.09 (-0.33, 0.15)	0.02 (-0.18, 0.23)	0.04 (-0.20, 0.26)	0.17 (-0.05, 0.39)
Stride duration in all WBs (s)	1.37 (0.12)	0.10 (-0.07, 0.30)	0.03 (-0.15, 0.23)	0.12 (-0.08, 0.33)	0.05 (-0.18, 0.25)	-0.04 (-0.24, 0.16)	0.02 (-0.20, 0.24)
Stride duration in longer (>30s) WBs (s)	1.39 (0.20)	-0.01 (-0.22, 0.23)	-0.04 (-0.26, 0.21)	0.17 (-0.09, 0.40)	0.05 (-0.19, 0.29)	0.07 (-0.14, 0.30)	0.04 (-0.18, 0.30)
<i>Bout-to-bout variability</i>							
Walking speed bout-to-bout variability in longer (>30s) WBs (%)	11 (6)	-0.05 (-0.28, 0.20)	-0.08 (-0.35, 0.18)	-0.01 (-0.26, 0.25)	-0.14 (-0.37, 0.09)	0.16 (-0.07, 0.38)	0.25 (-0.01, 0.48)
Stride length bout-to-bout variability in longer (>30s) WBs (%)	9 (6)	0.02 (-0.22, 0.26)	-0.09 (-0.32, 0.16)	0.05 (-0.18, 0.29)	0.05 (-0.19, 0.31)	0.09 (-0.12, 0.31)	0.14 (-0.09, 0.37)
Cadence bout-to-bout variability (%)	12 (2)	-0.02 (-0.21, 0.19)	0.04 (-0.16, 0.23)	-0.02 (-0.22, 0.18)	-0.09 (-0.28, 0.13)	-0.01 (-0.20, 0.20)	-0.36 (-0.51, -0.17)
Stride duration bout-to-bout variability (%)	20 (3)	0.10 (-0.10, 0.29)	-0.09 (-0.28, 0.12)	0.00 (-0.22, 0.20)	-0.19 (-0.36, 0.01)	-0.05 (-0.24, 0.15)	-0.20 (-0.42, 0.01)

DMO Digital Mobility Outcome; SPPB Short Physical Performance Battery; 4m gait speed Gait speed from the SPPB supervised 4-meter walk test; Short FES-I Short Falls Efficacy Scale International; FACIT-F Functional Assessment of Chronic Illness Therapy Fatigue Scale; BP Blood Pressure; WBs Walking Bouts.

Number of acute participants missing DMO values: Walking speed bout to bout variability in longer (>30s) WBs and Stride length bout to bout variability in longer (>30s) WBs: 27 missing values. Walking speed in longer (>30s) WBs, Maximum walking speed in longer (>30s) WBs, Stride length in longer (>30s) WBs, Cadence in longer (>30s) WBs, Maximum cadence in longer (>30s) WBs, and Stride duration in longer (>30s) WBs: 18 missing values.

Supplementary Fig. S6. Known groups validity of all 24 DMOs between the four recovery groups after a PFF. This was partly published previously [1].

