Figure S2: Scheme of training with music

SCHEME OF TRAINING WITH MUSIC

TOTAL TIME	PHASE	SUB PHASE	SUB PHASE TIME	KIND OF SONIFICATION
15'	**WARM-UP 1** Anteroposterior load shift in tandem position, left foot forward	W1A	1':30"	PRE-RECORDED STIMULI + METRONOME
		W1B	1':30"	REAL-TIME SONIFICATION
	WARM-UP 2 Anteroposterior load shift in tandem position, right foot forward	W2A	1':30"	PRE-RECORDED STIMULI + METRONOME
		W2B	1':30"	REAL-TIME SONIFICATION
	WARM-UP 3 Left foot swing	W3A	1':30"	PRE-RECORDED STIMULI + METRONOME
		W3B	1':30"	REAL-TIME SONIFICATION
	WARM-UP 4 Right foot swing	W4A	1':30"	PRE-RECORDED STIMULI + METRONOME
		W4B	1':30"	REAL-TIME SONIFICATION
	WARM-UP 5 March in place	W5A	1':30"	PRE-RECORDED STIMULI + METRONOME
		W5B	1':30"	REAL-TIME SONIFICATION
15'	**GAIT**	GA	7'	PRE-RECORDED STIMULI + METRONOME
		REST	1'	-
		GB	7'	REAL-TIME SONIFICATION

Figure S3: warm-up 1A and 2A

W1A, W2A - PRE-RECORDED STIMULI - ⏱ 1′:30″ + ⏱ 1′:30″
Anteroposterior load shift in tandem position, RIGHT / LEFT foot forward

A metronome and an external musical cue entrain the movement

BEAT	1		2		3		4	
METRONOME BPM = patients' spontaneous cadence (metronome is played independently)								
MUSICAL CUE: CHORD PROGRESSION EXAMPLE								
RIGHT FOOT	Toe tip up		Foot placement		Toe tip up		Foot placement	
LEFT FOOT	Foot placement		Heel up		Foot placement		Heel up	
MOVEMENT EXAMPLE								

Figure S4: warm-up 1B and 2B

W1B, W2B - REAL-TIME SONIFICATION - ⏱ 1′:30″ + ⏱ 1′:30″

Anteroposterior load shift in tandem position, RIGHT / LEFT foot forward

Sonification Phase: same musical patterns are re-created naturally, in real-time, by patient movement (without metronome)

REAL-TIME SONIFICATION CHORD PROGRESSION EXAMPLE Footstep = single progression fragment								
RIGHT FOOT	Toe tip up		Foot placement		Toe tip up		Foot placement	
LEFT FOOT	Foot placement		Heel up		Foot placement		Heel up	
MOVEMENT EXAMPLE								
COMPLETE MUSICAL SEQUENCE								

W3A, W4A - PRE-RECORDED STIMULI - ⏱ 1′:30″ + ⏱ 1′:30″
Left / Right foot swing
A metronome and an external musical cue entrain the movement

BEAT	1	2	3	4	1	2	3	4
METRONOME BPM = patients' spontaneous cadence (metronome is played independently)								
MUSICAL CUE: CHORD PROGRESSION EXAMPLE								
MOVEMENT EXAMPLE								
LEFT SWING	Left foot forward placement	Left swing (the left foot moves backward)	Left foot backward placement	Left swing (the left foot moves towards)	Left foot forward placement	Left swing (the left foot moves backward)	Left foot backward placement	Left swing (the left foot moves towards)

Figure S6: warm-up 3B and 4B

W3B, W4B - REAL-TIME SONIFICATION - ⏱ 1′:30″ + ⏱ 1′:30″
Left / Right foot swing

Sonification Phase: same musical patterns are re-created naturally, in real-time, by patient movement (without metronome)

REAL-TIME SONIFICATION CHORD PROGRESSION EXAMPLE Footstep and intermediate swing phase = single progression fragment								
MOVEMENT EXAMPLE								
LEFT SWING	Left foot forward placement	Left swing (the left foot moves backward)	Left foot backward placement	Left swing (the left foot moves towards)	Left foot forward placement	Left swing (the left foot moves backward)	Left foot backward placement	Left swing (the left foot moves towards)
COMPLETE MUSICAL SEQUENCE								

W5A – PRE-RECORDED STIMULI – ⏱ 1´:30"
March in place

A metronome and an external musical cue entrain the movement

BEAT		1	2	3	^	4	1	2	3	^	4
METRONOME BPM = patients' spontaneous cadence (metronome is played independently)		🎵	🎵	🎵		🎵	🎵	🎵	🎵		🎵
MUSICAL CUE: CHORD PROGRESSION EXAMPLE		♩	♩	♫	♫	♩	♩	♩	♫	♫	♩
RIGHT FOOT		●		●	●		●	●		●	●
LEFT FOOT			●	●		●	●	●		●	●

W5B - REAL-TIME SONIFICATION - ⏱ 1':30"
March in place

Sonification Phase: same musical patterns are re-created naturally, in real-time, by patient movement (without metronome)
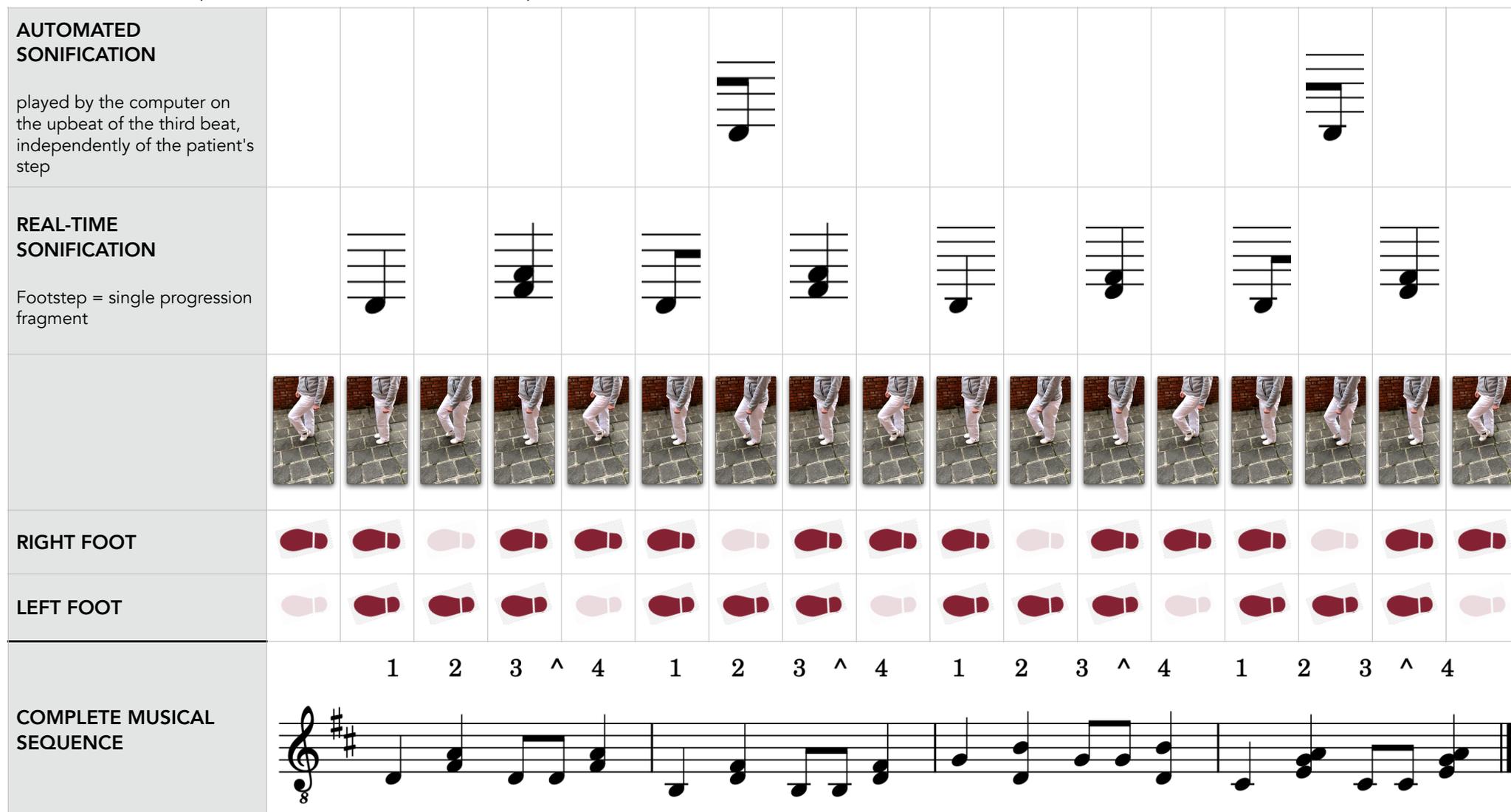
Figure S9: Gait A

GA – PRE-RECORDED STIMULI – ⏱ 7'
Gait
A metronome and an external musical cue entrain the gait

BEAT	1	2	3	^	4	1	2	3	^	4	
METRONOME BPM = patients' spontaneous cadence (metronome is played independently)	🎵	🎵	🎵		🎵	🎵	🎵	🎵		🎵	
MUSICAL CUE: CHORD PROGRESSION EXAMPLE	♪	♪	♪	♪	♪	♪	♪	♪	♪	♪	
FOOT PLACEMENT		👣		👣	👣		👣		👣	👣	
	👣		👣			👣		👣			

Figure S10: Gait B

GB – REAL-TIME SONIFICATION – ⏱ 7'
Gait

Sonification Phase: same musical patterns are re-created naturally, in real-time, by patient walk (without metronome). The patient is asked to gradually increase the pace to the maximum possible speed.