

**Multimedia Appendix 3** Intervention fidelity for education and feedback components

	Consistency (%)		Quality (%)		
	Present	Absent	Poor	Adequate	Excellent
<b>Education Booklet (n=21)</b>					
The booklet is designed to help you to sit less and move more	21 (100)	0 (0)	0 (0)	0 (0)	21 (100)
Sitting for too long can be harmful to your health	21 (100)	0 (0)	0 (0)	1 (5)	20 (95)
Use it or lose it - Keep muscles active to help prevent deconditioning	19 (90)	2 (10)	1 (5)	0 (0)	18 (95)
Other examples of benefits to be had	20 (95)	1 (5)	0 (0)	0 (0)	20 (100)
Directed to 7 suggestions for an active recovery	21 (100)	0 (0)	0 (0)	0 (0)	21 (100)
1 - Leave the house daily	14 (67)	7 (33)	0 (0)	0 (0)	14 (100)
2 - Make TV advert breaks active	21 (100)	0 (0)	0 (0)	0 (0)	21 (100)
3 - Stand up when waiting for something (e.g. bus, kettle)	7 (33)	14 (67)	0 (0)	0 (0)	7 (100)
4 - Tiptoe when waiting in a queue	0 (0)	21 (100)	N/A	N/A	N/A
5 - Increase your steps	18 (86)	3 (14)	0 (0)	0 (0)	18 (100)
6 - Sit to stand with no hands	2 (10)	19 (90)	0 (0)	0 (0)	2 (100)
7 - Treat the seat as a treat	7 (33)	14 (67)	0 (0)	2 (29)	5 (71)
Additional tailored top tip examples	17 (81)	4 (19)	0 (0)	0 (0)	17 (100)
	<b>188</b>	<b>85</b>	<b>1</b>		
<b>Total score</b>	<b>(68.9)</b>	<b>(31.1)</b>	<b>(0.5)</b>	<b>3 (1.6)</b>	<b>184 (97.9)</b>
<b>Smart Device (n=12)</b>					
LUMO and Smart Device communicate with each other	12 (100)	0 (0)	0 (0)	0 (0)	12 (100)
Patient shown how to lock and unlock the Smart Device	9 (75)	3 (15)	0 (0)	0 (0)	9 (100)
<b>Total score</b>	<b>21 (87.5)</b>	<b>3 (12.5)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>21 (100)</b>
<b>LUMO App (n=12)</b>					
App provides you with information on sitting, standing and stepping	12 (100)	0 (0)	0 (0)	0 (0)	12 (100)
Patient shown where to find time spent sitting	12 (100)	0 (0)	0 (0)	0 (0)	12 (100)
Patient shown where to find how many times they have stood up	12 (100)	0 (0)	0 (0)	1 (8)	11 (92)
Patient shown where to find their step count	12 (100)	0 (0)	0 (0)	0 (0)	12 (100)
<b>Total score</b>	<b>48 (100)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (2.1)</b>	<b>47 (97.9)</b>
<b>Sit Time Panel (n=12)</b>					
Patient shown the pie chart for sitting, standing, stepping, lying down	12 (100)	0 (0)	0 (0)	0 (0)	12 (100)

Patient shown the hourly bar chart for all behaviours	12 (100)	0 (0)	0 (0)	1 (8)	11 (92)
Patient shown how to look back at previous days	10 (83)	2 (17)	0 (0)	5 (50)	5 (50)
Patient shown how to return to today's information	5 (42)	7 (58)	0 (0)	0 (0)	5 (100)
Patient shown how to return to the home screen	12 (100)	0 (0)	0 (0)	1 (8)	11 (92)
<b>Total score</b>	<b>51 (85.0)</b>	<b>9 (15.0)</b>	<b>0 (0)</b>	<b>7 (13.7)</b>	<b>44 (86.3)</b>
<b>Stand Ups Panel (n=12)</b>					
Patient shown the hourly bar chart for all behaviours	10 (83)	2 (17)	0 (0)	3 (30)	7 (70)
Patient shown how to look back at previous days	10 (83)	2 (17)	0 (0)	5 (50)	5 (50)
Patient shown how to return to today's information	7 (58)	5 (42)	0 (0)	2 (29)	5 (71)
Patient shown how to return to the home screen	9 (75)	3 (15)	0 (0)	0 (0)	9 (100)
		<b>12</b>			
<b>Total score</b>	<b>36 (75.0)</b>	<b>(25.0)</b>	<b>0 (0)</b>	<b>10 (27.8)</b>	<b>26 (72.2)</b>
<b>Steps Panel (n=12)</b>					
Patient shown the hourly bar chart for all behaviours	10 (83)	2 (17)	0 (0)	2 (20)	8 (80)
Patient shown how to look back at previous days	11 (92)	1 (8)	0 (0)	7 (64)	4 (36)
Patient shown how to return to today's information	7 (58)	5 (42)	0 (0)	4 (57)	3 (43)
Patient shown how to return to the home screen	11 (92)	1 (8)	0 (0)	1 (9)	10 (91)
<b>Total score</b>	<b>39 (81.3)</b>	<b>9 (18.8)</b>	<b>0 (0)</b>	<b>14 (35.9)</b>	<b>25 (64.1)</b>
<b>Vibration Prompt (n=12)</b>					
LUMO provides a vibration prompt when patient sits for 'too long'	12 (100)	0 (0)	0 (0)	1 (8)	11 (92)
Vibration will only go off once then the timer will reset	8 (67)	4 (33)	0 (0)	1 (12)	7 (88)
Patient chooses the duration of sitting before vibration occurs	12 (100)	0 (0)	0 (0)	2 (17)	10 (83)
<b>Total score</b>	<b>32 (88.9)</b>	<b>4 (11.1)</b>	<b>0 (0)</b>	<b>4 (12.5)</b>	<b>28 (87.5)</b>

Quality definitions for Education components: 'Poor', mentioned without examples; 'Adequate', explained without examples; 'Excellent', explained with examples.

Quality definitions for Feedback components were: 'Poor', mentioned without patient performing task; 'Adequate', explained without patient performing task; 'Excellent', explained with patients performing task.