# Supplementary file 1 – Survey

Hospital - Full/time

A survey of rheumatology health professionals' awareness and use of physical activity measurement

# **Demographics** Q 1. Are you – Male/ Female Q 2. What age category are you in? 18 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 to 74 75 or older Q 3. What is your profession? Physiotherapist Nurse **Occupational Therapist** Other (please specify) Q 4. How many years are you qualified? Q 5. How many years are you working within Rheumatology? Q 6. Where is your Place of Work? (more than 1 choice is possible) Hospital - Part/time

Primary care (PCCC) - Part/time

Primary care (PCCC) - Full/time

Private Practice - Part/time

Private Practice - Full/time

Other (please specify)

Q 7. On a monthly basis what is the percentage of people with inflammatory arthritis that you treat?

< 5%

6-10%

11-25%

26-50%

51-75%

76-100%

# **Physical Activity Measurement**

Physical Activity is important for people with Arthritis. While the measurement and monitoring of same can be a challenge, it has a number of essential uses. The following questions are concerned with the more popular ways in which Physical Activity is monitored. Better knowledge and understanding of patient's current use and barriers will guide the evidence base and future practice of health promotion. You will be asked questions on the following devices:-

## SIMPLE BODY-WORN SENSOR

This type of device comes in one piece and measures your physical activity automatically. You wear it directly onto your body from where you can read the output immediately from the display of the device itself (e.g. pedometer, accelerometer, smartphone worn on your body).

# COMPLEX BODY-WORN SENSOR

This type of device comes in multiple pieces and measures your physical activity automatically. You wear it directly onto your body and to read the output of your results you need a link to another device (e.g. watch with wireless link to a smartphone application or website, heart rate monitor with wrist band).

# **PAPER QUESTIONNAIRE**

This is a paper survey with questions regarding the physical activities (e.g. walking) you performed over a certain time period (e.g. last week).

#### PAPER DIARY

This is a paper agenda where you can write down the physical activities (e.g. walking for an hour) you performed over a certain time period.

## **DIGITAL QUESTIONNAIRE**

This is a digital survey on a smartphone, tablet or computer with questions concerning the physical activities (e.g. walking) you performed over a certain time period (e.g. last week)

## **DIGITAL DIARY**

This is a digital agenda where you can digitally select/type in your physical activities (e.g. walking for one hour) mostly on an hour-to-hour or daily basis

Q 8. Do you think it is important to measure physical activity?

Yes / No

Q 9. Why do you/don't you think it is important to measure physical activity?

Q 10. Please rate your confidence in using each of the following devices/ways in monitoring physical activity? (0 is not confident and 10 is very confident)

0 1 2 3 4 5 6 7 8 9 10

SIMPLE BODY WORN SENSOR not linked to other devices (Pedometer/Accelerometer/Watch)

COMPLEX BODY-WORN SENSOR linked to digital sources (Wireless/GPS)

PAPER QUESTIONNAIRE

PAPER DIARY

DIGITAL QUESTIONNAIRE (Smartphone, tablet)

**DIGITAL DIARY** 

Q 11. Please rate your confidence in edeach of the following devices/ways in noting confident)	_	•					•				
	0	1	2	3	4	5	6	7	8	9	10
SIMPLE BODY WORN SENSOR not linke	d to othe	er dev	vices	(Pedo	omete	er/Ac	celer	omet	er/W	atch)	
COMPLEX BODY-WORN SENSOR linked	to digita	al sou	rces	(Wire	less/0	GPS)					
PAPER QUESTIONNAIRE											
PAPER DIARY											
DIGITAL QUESTIONNAIRE (Smartphone, tablet)											
DIGITAL DIARY											
Q 12. Please rate your confidence in int monitoring physical activity, in a clinica	•	_						_			s in
	0	1	2	3	4	5	6	7	8	9	10
SIMPLE BODY WORN SENSOR not linke	d to othe	er dev	vices	(Pedo	omete	er/Ac	celer	omet	er/W	atch)	
COMPLEX BODY-WORN SENSOR linked	to digita	al sou	rces	(Wire	less/0	GPS)					
PAPER QUESTIONNAIRE											
PAPER DIARY											
DIGITAL QUESTIONNAIRE (Smartphone	, tablet)										
DIGITAL DIARY											
Q 13. The following questions are in rel	lation to	SIMP	LE B	ODY-\	WORI	N SEN	SOR				
Do you use Simple body-worn sensors i	in your v	vork v	with <sub> </sub>	oatier	nts wl	no ha	ve inf	flamn	nator	y arth	ritis?
Yes No											
Q 14. Why do you/don't you use a Simp patients?	ole body	-worr	n sen	sor w	ith yc	our in	flamr	nator	y artl	nritis	

Q 15. Are there any barriers to you in using a Simple body-worn sensor in your clinical setting?
Yes No
Q 16. If Yes, please choose from the following (Multiple answers are possible)
I do not understand why using a simple body-worn sensor would be important
I am not interested in using that type of device
It feels impersonal
It is too expensive
I do not have access to proper equipment
It takes too much time
I do not know what to do with the results
I do not believe that the results are accurate
I do not have anyone to talk to about the results
I have difficulties in operating the device
Other (please specify)

Q 17. What would make it easier for you to use a Simple body-worn sensor in your clinical setting?

Q 18. The following questions are in relation to COMPLEX BODY-WORN SENSOR
Do you use Complex body-worn sensors in your work with patients who have inflammatory arthritis?
Yes No
Q 19. Why do you/don't you use a Complex Body-Worn Sensor with your inflammatory arthritis patients?
Q 20. Are there any barriers to you in using a Complex body-worn sensor in your clinical setting?
Yes No
Q 21. If Yes, please choose from the following (Multiple answers are possible)
I do not understand why using a complex body-worn sensor would be important
I am not interested in using that type of device
It feels impersonal
I do not have access to proper equipment
It is too expensive
It takes too much time
I do not know what to do with the results
I do not believe that the results are accurate

I do not have access to proper equipment It is too expensive
It takes too much time
I do not know what to do with the results
I do not believe that the results are accurate
I do not have anyone to talk to about the results Other (please specify)
Q 27. What would make it easier for you to use Questionnaires in your clinical setting?
Q28. The following questions are in relation to PAPER OR DIGITAL DIARY
Do you use Diaries in your work with patients who have inflammatory arthritis?
Yes No
Q29. Why do you/don't you use Diaries with your inflammatory arthritis patients?
Q30. Are there any barriers to you in using Diaries in your clinical setting?
Yes No
Q 31. If Yes, please choose from the following (Multiple answers are possible)
I do not understand why using a diary (Paper or Digital) would be important I am not interested in using that type of device
It feels impersonal

I do not have access to proper equipment It is old-fashioned										
It is too expensive										
it takes too much time										
I do not know what to do with the results										
I do not believe that the results are accurate										
I do not have anyone to talk to about the results Other (please specify)										
Q 32. What would make it easier for you to use Diaries in your clinical setting?										
AEROBIC CAPACITY TESTING										
Q 33. Please rate your familiarity with the following tests used in assessing aerobic capacity										
Very familiar Somewhat familiar Vaguely familiar Never heard of										
Bicycle Ergometer										
Treadmill										
Aerobic Capacity Tests i.e. Walking/Running										
Q 34. Please list any other aerobic capacity tests that you are familiar with and/or have heard of										

Q 35. Please rate your cor performing aerobic capac										ry ar	thritis	in	
	0	1	2	3	4	5	6	7	8	9	10		
Level of Confidence													
Q 36. Please rate your cor confident and 10 is very c		nterpre	eting :	the r	esult	s fro	om ae	robic	capa	icity t	ests (I	0 is n	ot
		0	1	. 2	2	3	4	5	6	7	8	9	10
Level of Confidence													
Q 37. Do you use aerobic arthritis?	capacity tes	ts in yo	our da	ily w	ork v	with	patie	nts w	ho h	ave ii	nflamr	mato	ry
Yes No													
Q 38. If yes why do you us	se aerobic ca	apacity	tests	?									
Q 39.If no why don't you (	use aerobic	capacit	y test	ts? (N	∕lulti	ple a	answe	ers ar	e pos	ssible	)		
I do not have time	2												
I do not have the	proper Equi	pment											
I do not know how	v to perforn	n such a	a test										
I do not know hov	v to analyse	the da	ta										

My patients are in too poor condition	
I do not think it is important	
Other (please specify)	
Educational Needs	
Q 40. Would you be interested in further education around aerobic capacity measurement	?
Yes No	
Q 41. Would an online module on aerobic capacity measurement be of interest to you?	
Yes No	
Q 42. If No what alternative format would you prefer?	
Q 43. Would you be interested in further education around measuring physical activity?	
Yes No	
Q 44. Would an online module on physical activity measurement be of interest to you?	
Yes No	
Q 45. If No what alternative format would you prefer?	