

Additional File 1:  
Quantitative Fidelity Checklist for non-pharmacological component of intervention

<b>Session 1:</b>		Complete	Not completed	Partially completed	Not applicable
<b>Intervention categories</b>	<b>Individual components</b>				
<b>Materials</b>					
	ARUK booklet on OA				
	Exercise/activity diary				
	Goal Setting forms				
<b>Introduction</b>					
	Introductions				
	Aim of interventions				
	Content				
	Structure				
<b>Holistic assessment of person with OA.</b>					
	Illness perception of OA explored				
	Pain severity explored				
	Pain impact on occupation or social activity explored				
	Current level of physical activity/ exercise and its intensity explored				
	Views and attitudes to weight loss explored (if required)				
	Issues with mood explored				
	Sleep quality explored				
	Support network and caregiver involvement discussed				
	Co-morbidities				
	Other MSK pain				
	Inspection of knee				
	Palpation of knee				
	Active ROM				
	Passive ROM				
	Observation of Gait				
<b>Education</b>					
	Illness perception of OA addressed				
	Nature of OA discussed				
	Core treatments for OA addressed				
	Rationale for self-management strategies addressed				
	Physical Activity /benefits of exercise addressed				
	Activity rest cycle/pacing explained				
	Reflection on activity/pacing and recommendations discussed				
	Participants had the chance to contribute to discussion				
<b>Exercise</b>					
	Warm up exercises explained/demonstrated				
	Aerobic exercises explained/demonstrated				
	Strengthening explained/demonstrated				
	Stretching exercises explained/demonstrated				
	Participants had the chance to practice prescribed exercises				
	Exercise corrected if required				
	Smart goals setting				
	Action planning to carry out exercise				
	Patients' level of confidence for the exercise programme determined				
	Barriers and facilitators identified (if confidence low)				
<b>Weight loss (if required)</b>					
	Previous efforts to lose weight discussed				
	Healthy BMI range and weight loss discussed				

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5% weight loss goal calculated with timescale				
Agree weight loss goal				
Action plan for weight loss				
Discuss strategies for weight loss (calorie deficit, portion size, meal planning, tops tips, slimming groups, increasing PA etc )				
Signpost to NHS weight loss plan				
Patients' level of confidence for weight loss goal determined				
Barriers and facilitators identified (if confidence low)				
<b>Adjunct treatments</b>				
Use of heat/cold discussed				
Walking aids discussed				
Footwear discussed				
<b>Review and planning</b>				
Session review: goal setting synopsis and action plan				

Complete = component was fully delivered by the nurse

Not Complete = component was not delivered by the nurse

Partially completed = there was an attempt to deliver this component by the nurse but it was not delivered fully

Not applicable = component was not applicable for example weight loss components if the participant had a body mass index < 25

Fidelity scores will be calculated for each category and each session as the percentage of completed components from the total number of components. Components which were not applicable will be excluded from the overall total.

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<b>Follow up session 2, 3:</b>	Complete	Not Completed	Partially completed	Not applicable
<b>Intervention categories</b>	<b>Individual components</b>			
<b>Assessment</b>				
	Pain symptoms since previous visit explored			
	Factors influencing pain explored			
	Physical activity's levels explored			
<b>Education</b>				
	Activity rest cycle/pacing explained			
	Individual reflection on activity-rest cycle/pacing facilitated			
	Physical activity's levels addressed			
	Participants had the chance to contribute to discussion			
<b>Exercise</b>				
	Exercise goals and action plan reviewed			
	Exercise/activity diary reviewed			
	Problem solving of previous weeks' action plan			
	Previous session exercises reviewed and performed by the participant			
	Exercise corrected if required			
	Smart goals reviewed			
	Strengthening exercises progressed or adapted			
	Aerobic exercises progressed or adapted			
	Participants had the chance to practice strengthening exercises			
	Patients' level of confidence for the exercise programme determined			
	Barriers and facilitators carrying out the exercise identified (if confidence low)			
<b>Weight loss (if required)</b>				
	Weight loss goal and action plan reviewed			
	Weight reviewed			
	Action plan updated			
	Patients' level of confidence for weight loss goal determined			
	Barriers and facilitators identified (if confidence low)			
<b>Adjunct treatments</b>				
	Use of heat/cold discussed			
	Walking aids discussed			
	Footwear discussed			
<b>Review and planning</b>				
	Session review: goal setting synopsis and action plan			

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<b>Final session:</b>	Complete	Not completed	Partially completed	Not applicable
<b>Intervention categories</b>				
<b>Individual components</b>				
<b>Assessment</b>				
Pain symptoms since previous visit explored				
Factors influencing pain explored				
Physical activity's levels explored				
<b>Education</b>				
Long-term self-management addressed				
Participants had the chance to contribute to discussion				
<b>Exercise</b>				
Exercise goals and action plan reviewed				
Exercise/activity diary reviewed				
Problem solving of previous weeks' action plan				
Participants had the chance to attempt and practice previous exercises				
Exercise corrected if required				
Patients' level of confidence for the exercise programme determined				
Barriers and facilitators carrying out the exercise identified (if confidence low)				
Exercises aiming for long term management given				
<b>Weight loss (if required)</b>				
Weight loss goal and action plan reviewed				
Weight reviewed				
Action plan updated				
Patients' level of confidence for weight loss goal determined				
Barriers and facilitators identified (if confidence low)				
Long term action plan for weight loss given				
<b>Review and planning</b>				
Session review – long term goal setting and action planning recap				