

Table 1: Schedule of enrolment, intervention and assessments

	Enrolment	Allocation	Secondary	Primary
TIMEPOINT		0w	8w, 16w	24w
ENROLMENT:				
Eligibility screen	X			
Informed consent	X			
Allocation		X		
INTERVENTIONS:				
Control education website (control group only)		←	→	
My Hip Exercise website (intervention group only)		←	→	
My Exercise Messages App (intervention group only)		←	→	
ASSESSMENTS:				
Descriptive data				
Age (years)	X			
Sex	X			
Gender	X			
Height (self-reported, metres)	X			
Weight (self-reported, kilograms)	X			
BMI (calculated from self-reported height and weight)	X			
Ethnicity	X			
Geographical location (postcode)	X			
Education level	X			
Current employment status	X			
Comorbidities (Self-Administered Comorbidity Questionnaire) [40]	X			
Symptoms in other joints	X			
Duration of symptoms (years)	X			

Medication usage	X			
Primary outcomes				
Severity of hip pain during walking (11-point NRS)	X			X
Physical function subscale of the WOMAC [45]	X			X
Secondary outcomes				
Pain subscale of HOOS [46]	X			X
Function, sports and recreational activities subscale of HOOS [46]	X			X
Hip-related quality-of-life subscale of HOOS [46]	X			X
Global rating of overall change in hip condition				X
Health-related quality of life (AQoL-8D) [48]	X			X
Incidental and Planned Exercise Questionnaire (IPEQ-W) [49]	X			X
Global rating of change in physical activity				X
Brief Fear of Movement Scale for OA [50]	X			X
Pain subscale of the Arthritis Self Efficacy Scale [51]	X			X
Self-efficacy for exercise scale [52]	X			X
Use of oral pain medications for hip pain				X
Process measures				
Website visits ^a			X	X
Downloaded exercise programs (intervention group only) ^b				X
Number of days home strengthening exercise performed (intervention group only) ^c			X	X
Exercise Adherence Rating Scale [EARS] Section B (intervention group only)				X
Downloaded “My Exercise Messages” app (intervention group only)				X
Frequency of entering exercise into the “My Exercise Messages” app (intervention group only) ^d				X
Use of the “My Exercise Messages” app (intervention group only) ^e			X	X

Usefulness of the “My Hip Exercise” website (intervention group only) ^f				X
Usefulness of the “My Exercise Messages” app (intervention group only) ^g				X
Exercise equipment use (intervention group only) ^h				X
Registration to recommended external websites (intervention group only) ⁱ				X
Other measures				
Co-intervention use				X
Leg strengthening exercises in the past 24 weeks (control group only)				X
Adverse events				X

WOMAC = Western Ontario and McMaster Universities Osteoarthritis Index; BMI = Body Mass Index; OA = osteoarthritis; NRS = Numeric rating scale; HOOS = Hip dysfunction and Osteoarthritis Outcome Score

^a Self-reported. Participants will be asked “How many times did you visit the website over the past 2 months?” with response options: “never”, “1-5 times”, “6-10 times” and “>10 times”.

^b Yes/No response to “Did you download any of the exercise programs from the website as PDF documents?” for programs 1, 2, and 3.

^c Self-reported. Participants will be asked “In the past two weeks, on how many days did you perform the strengthening exercises from the “My Hip Exercise” program (0-14).

^d Self-reported. Scored on a 5-point Likert scale for “How often did you enter your number of exercise days into the app as requested” (Never, rarely, sometimes, often, always)

^e Self-reported. Participants will be asked “On how many days in the past 14 days did you use the “My Exercise Messages” app (including reading any notifications, entering data and/or opening the app)” with response options: “never”, “1-5 times”, “6-10 times” and “>10 times”.

^f Self-reported. Scored on an 11-point NRS for “How useful did you find the “My Hip Exercise” website program? (not including the app)” from 0 = “not at all useful” to 10 = “extremely useful”.

^g Self-reported. Scored on an 11-point NRS for “How useful did you find the “My Exercise Messages” app?” from 0 = “not at all useful” to 10 = “extremely useful”.

^h Yes/No response to “Did you use exercise equipment (such as weights or elastic bands) to add resistance to your leg for your strengthening exercises?”

ⁱ Yes/No response to “Did you register for this course?” for 1) an online course “Taking Control of Your Hip and Knee Osteoarthritis,” and 2) an online course “PainTRAINER”