Objectives: To explore the feasibility and preliminary efficacy of a web-based, peer-supported exercise program for people with hip or knee OA.

Methods: This study was a single-group, pre-post feasibility study. Patients aged 40-80 years with hip or knee OA who were not candidates for surgery were eligible. The 12-week intervention was delivered through a patient-organizations (The Norwegian Association for Rheumatic Diseases) web-based platforms, and included weekly exercise programs, weekly motivational messages, an OA and exercise website and assigned peer-supporters. Feasibility was evaluated by calculating the proportion of eligible patients who were enrolled and retained at follow-up, as well as time resources used on delivery of the intervention. Acceptability was evaluated by calculating proportion of patients who had valid baseline accelerometer data and completed the maximal cardiorespiratory exercise test according to protocol. Primary efficacy measures were change in PA assessed by accelerometers and change in exercise capacity (VO₂peak) assessed by indirect maximal cardiorespiratory exercise test. Secondary efficacy measures were change in patient reported outcomes assessed by HOOS and KOOS (www.koos.nu) (a 10-point change in normalized scores was considered a minimally important change). Data was analysed using paired sample t-test, given as mean change (95% confidence interval) and p-values.

Results: We identified 49 eligible patients of which 35 (71%) consented and were enrolled. Among those who consented, 22 (63%) were retained. Time resources used on delivery of the exercise programs and motivational messages were mean (SD) 7.3±1.1 min per week/patient. Compliance with wearing the accelerometer was mean (SD) 6.1±1.0 valid days (mean (SD) 13.8±1.3 hours/day). Twenty (67%) out of 30 patients who attended baseline testing performed the maximal cardiorespiratory exercise test, of which 18 completed according to protocol. Due to Covid-19 restrictions, follow-up testing of primary efficacy measures included only eight patients. For these patients there was a significant increase from baseline to follow-up on moderate-to-vigorous PA (mean change 16.4 minutes/day; 95% CI 6.9, 25.9, p=0.005) and VO₂peak (mean change 1.83 ml/kg/min; 95% CI 0.29, 3.36, p=0.026). Across all secondary efficacy measures 30-52% of the patients (n=21) improved from baseline to follow-up (Figure 1).

Figure 1. Proportion (%) of patients with Minimally Important Change (from baseline to follow-up) in normalized scores in subdomains of Hip disability and Osteoarthritis Outcome Score (HOOS) / Knee injury and Osteoarthritis Outcome Score (KOOS).

Conclusion: Overall, the examined study processes were considered to be feasible and acceptable. Some minor amendments should be applied to improve the recruitment and retention rate before it can be carried out in a larger trial. The efficacy results should be interpreted with caution due to the small sample size. However, if the positive results in this study are confirmed in a power-calculated randomised controlled trial, our novel follow-up strategy may be implemented and recommended for long-term management of hip and knee OA.

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OP0155-HPR

REMOTE MANAGEMENT OF RHEUMATOID ARTHRITIS VS ROUTINE OUTPATIENT FOLLOW-UP: A PROSPECTIVE, LONGITUDINAL REAL-WORLD STUDY

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Background: Remote management of rheumatoid arthritis (RA) using patient self-assessment of disease and patient-reported outcomes has potential to inform timely clinical decisions on disease management, reduce burden on busy rheumatology services and promote effective self-management. However, it is unclear how patients' self-reporting relates to treatment decisions.

Objectives: To determine the agreement between remote treatment decisions based on patient self-assessment questionnaire assessed blindly by a health professional and treatment decisions based on routine outpatient monitoring appointments.

Methods: This was a prospective real-world study including patients (who gave informed consent) enrolled in an observational study of RA patients starting a new biologic therapy.

Enrolled patients continued with their usual care and usual clinic monitoring. In addition, they completed at home, self-assessment questionnaires at monthly intervals, including: two self-reported components which are collected as part of routine clinical practice (joint stiffness and flare), visual analogue scales for pain, global health and fatigue; and HAQ-DI and self-efficacy scales (Arthritis Self-Efficacy Pain and Other Symptoms subscales) at inclusion visits, 12 and 24 months. Remote treatment decisions were made by an independent (blinded) health professional, based on the self-assessment questionnaires and information collected in the study: medical history, ongoing therapies for RA, clinical outcomes, adverse events and toxicity. In this analysis, the independent blinded clinician did not have the same information as the routine hospital visit clinician (blood results and joints assessment).

The remote decisions were matched with the hospital visit decisions (within 2 weeks) and the measure of agreement between the 2 raters (independent blinded health professional and clinician at outpatient appointment) were evaluated using kappa coefficient: <0.2, 0.21-0.40, 0.41-0.60, 0.61-0.80 and 0.81-0.99 representing poor, fair, moderate, substantial and almost perfect agreement respectively.

Results: A total of 72 RA patients were recruited into the sub-study: mean (SD) age 57.8 (11.6), disease duration 11.7 (10.3) and 52 (87%) were female. The pre-categorised remote decisions were: no change to biologic, stop biologic, add concomitant DMARD, reduction/removal of a concomitant DMARD and bring in for review. There were 57 matched decisions between the independent health professional and the outpatient clinicians. The outpatient clinician made 7 changes to biologic and 18 non-biologic therapy changes, while the remote health professional made 1 change to biologic and 17 changes to a non-biologic DMARD including bringing in for review. The self-assessment questionnaires reported 34 RA flares of which 21 had resolved. In the matched decisions, there was only one adverse event that needed stopping treatment, identified by both the remote and the outpatient treatment. The independent health professional and the outpatient clinician had a 'fair' agreement on changes to biologic therapy (Kappa = 0.226, p = 0.007) and overall changes to RA therapy (Kappa = 0.24, p = 0.07).

Conclusion: Remote RA monitoring using patient self-assessment and outcome measures was feasible with fair agreement on treatment decisions. Further work is required on understanding the importance of adding blood test monitoring to remote decision-making.

Disclosure of Interests: None declared

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THE EFFECT OF A PERSON-CENTERED SMOKING CESSATION PROGRAM IN RHEUMATOID ARTHRITIS PATIENTS IN A RHEUMATOLOGY OUTPATIENT CLINIC SETTING – RESULTS OF AN INTERVENTIONAL FEASIBILITY STUDY

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Background: Smoking is associated with worse treatment response¹ and higher mortality² in rheumatoid arthritis (RA).