post-infiltration. We also assessed heart rate and blood pressure on pre and post-procedure.

Results: Seventy-two participants were included with a mean age of 55.48 $\pm$ 12.39 years (39-78), treated for an inflammatory rheumatic or degenerative disease (21, 51 respectively), and receiving joint infiltration for the first time among 37. Sites of infiltrations were: wrist=7, elbow=10, shoulder=17, hip=1, knee=22, epidural=6, plantar heel=9. There were no significant differences in pre-procedural

VAS-Anx, VAS-Pain, or physiological parameters between cases and controls. Cases had a significant decrease in VAS-Anx from pre to post-infiltration (Mean post-VAS-Anx=23.33/100, $p=0.017$) but not significant compared with controls ($p=0.297$). Patients who have performed the breathing technique had no significant decrease in VAS-Pain from pre- to post-infiltration ($p=0.083$) and compared with controls ($p=0.662$). Physiological parameters showed a significant decrease in heart rate of cases from pre to post-infiltration ($p<0.0001$) and compared with controls ($p=0.036$), but no significant decrease in systolic or diastolic blood pressure from pre to post-infiltration and compared with controls. There were no correlations between all participants' VAS-Anx/VAS-Pain and age, gender, infiltration site or history and joint pain causes.

Conclusion: This study suggests that diaphragmatic breathing relaxation is an effective nonpharmacological intervention that could be used in controlling anxiety and experienced pain during joint infiltration.

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POS0156-HPR 'THE RIGHT ADVICE, IN THE RIGHT WAY AND AT THE RIGHT TIME': AN INNOVATIVE MULTIDISCIPLINARY APPROACH TO ADDRESS CLIENT-IDENTIFIED PARTICIPATION NEEDS IN EARLY INFLAMMATORY ARTHRITIS

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Background: Inflammatory arthritis (IA) is a complex life-long disease with negative consequences on occupational performance and significant impact on meaningful life roles. International guidelines for the clinical management of IA consistently recommend early intervention and a multidisciplinary (MDT) approach as the optimum method to address the medical, symptom and broader life impacts, however, barriers to timely access to the MDT is a common issue in clinical practice. Limited research has explored how clinical services support broader life impacts and participation restrictions associated with early disease as part of routine healthcare. Four rheumatology services in Ireland have recently reconfigured to provide an MDT-led early arthritis service which operates in parallel to traditional medical clinics. Staffed by nurses, occupational therapists, and physiotherapists this service provides assessment and management to clients with a new diagnosis of IA along a model of care within four to six weeks of diagnosis with mechanisms to follow the client over their first year of diagnosis.

Objectives: To explore how a novel MDT-led early arthritis service addresses client-identified participation restrictions associated with early IA.

Methods: A qualitative description (QD) study was used to explore the perspectives of service providers and service users of this MDT-led early arthritis service. Data were gathered using one-off focus groups with service providers, and individual interviews with service users.

Results: All staff ($n=15$) currently working in these services participated in the focus groups. Forty-three service users with IA participated in individual interviews (males $n=12$; females $n=31$); diagnosis duration ranged from 5 to 24 months. QD principles and thematic analysis were used in data analysis.

Extensive limitations in everyday activity and restriction in participation in meaningful, age-appropriate life roles in early IA were outlined by service users and service providers. Participants described how the MDT-led model provided automatic and immediate access to services focussed on identification and management of occupation-based participation restrictions early in the disease. Participants described how the model used a flexible approach that ensured; ease of early access to a full MDT, prolonged support from the MDT, and a person-centred approach incorporating social prescribing and self-management principles. Service users emphasised the strength of the MDT approach of providing 'the right advice, in the right way and at the right time' as the most influential feature that assisted them to address participation restrictions and support positive health outcomes. This was accomplished by the service providers acting in a coordinated and interdisciplinary manner with a clear remit to address participation restrictions alongside the traditional symptom management approach. Findings highlight the feasibility of the MDT-led early arthritis model as an approach to address participation-based restrictions as part of routine healthcare that delivers on the rheumatology guidelines and was positively regarded by both service users and service providers.

Conclusion: Findings provide important insights into the role of an innovative early MDT intervention approach in addressing client-identified participation needs in early IA. This model maps onto the Irish rheumatology model of care (HSE, 2018), 'right place, right time' approach but importantly includes a 'right way' approach which is identified as influential in the effective delivery of client-focused and client-centred care.

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POS0157-HPR CONSTRUCT VALIDITY OF THE OCTOPUS STRATIFICATION ALGORITHM FOR ALLOCATING PATIENTS WITH KNEE OSTEOARTHRITIS INTO CLINICALLY RELEVANT SUBGROUPS

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Background: We recently developed a model of stratified exercise therapy [1], consisting of (i) a stratification algorithm allocating patients with knee osteoarthritis (OA) into clinically relevant subgroups, and (ii) subgroup-specific exercise therapy. More specifically, in our model we distinguish the following subgroups with proposed underlying phenotypes: 'high muscle strength subgroup' representing a post-traumatic phenotype, 'low muscle strength subgroup' representing an age-induced phenotype and 'obesity subgroup' representing a metabolic phenotype.

Objectives: In the present study, we aimed to validate the construct of this algorithm, focusing on 3 research questions: (i) are the proportions of patients in each subgroup similar across cohorts?; (ii) are the characteristics of each of the subgroups in line with their proposed underlying phenotypes?; (iii) are the effects of usual exercise therapy in the 3 subgroups in line with the proposed effect sizes?

Methods: Data from five studies (four trials and one cross-sectional cohort) were used to validate the construct of our algorithm by 63 a priori formulated hypotheses regarding the research questions.

Results: Baseline data from a total of 1,211 patients with knee OA were analyzed for the first and second research question, and follow-up data from 584 patients who were part of an exercise arm within a trial for the third research question. In total, the vast majority (73%) of the hypotheses were confirmed. Regarding our first research question, we found similar proportions in each of the three subgroups across cohorts, especially for three cohorts. Regarding our second research question, subgroup characteristics were almost completely in line with the proposed underlying phenotypes. Regarding our third research question, unexpectedly, usual exercise therapy resulted in similar, moderate to large effect sizes for knee pain and physical function for all three subgroups.

Conclusion: This study suggests that our algorithm might be a valid instrument to allocate patients with knee OA into clinically relevant subgroups, as most of our a priori hypotheses could be confirmed. On the other hand, subgroups did not differ substantially in effects of usual exercise therapy, contrary to our expectation. An ongoing trial [1] will assess whether this algorithm accompanied by subgroup-specific exercise therapy improves clinical and economic outcomes.

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POS0158-HPR UNDERSTANDING NURSE-LED CARE IN EARLY RA: INTERVIEW STUDY WITH RHEUMATOLOGY NURSE SPECIALISTS

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