Dataset	PRELIM Main Survey (2017)
DOI	TBA
Project title	Getting sustainable, person-centred musculoskeletal health intelligence from primary care electronic health record linkage and modelling: the PRELIM initiative
Short title/acronym	PRELIM
Principal Investigator	Dr Ross WILKIE
Funding	Project grant from Arthritis Research UK/Versus Arthritis (21403)
Project start/end date	1 January 2017 - 31 December 2019
Duration	36 months
Coapplicants and institutions	<u>Keele University:</u> Dahai YU, Kelvin JORDAN, George PEAT, Joanne PROTHEROE, Clare JINKS, Kate DUNN, Mamas MAMAS, Steven BLACKBURN, Stephen DENT (public co-applicant)
	<u>University of Oxford:</u> Andrew JUDGE, Daniel PRIETO-ALHAMBRA, Alan SILMAN
	<u>University of Southampton:</u> Karen WALKER-BONE
Primary aims and objectives	*[Extract from grant application]* **Vision:** to develop a data capture system, appropriate for the NHS, that can be used to describe the status of musculoskeletal health within the UK, and monitor variation over time and between different geographical and other defined populations. **Aim:** to assess if the primary care electronic health record (EHR) supplemented by patient collected outcome data is a feasible and valid approach to achieve this vision **Specific objectives:** Within the programme outlined we propose three key areas of "deliverables": 1. Provide detailed description of musculoskeletal health (including MSK-HQ scores, healthy work life expectancy, disability), key comorbidity (e.g. cardiovascular risk and mental health) and care among consulters and the general population within one geographical area by linking a musculoskeletal-focussed patient survey to local long-standing, high-quality, primary care EHR data using robust epidemiological approaches 2. Generate musculoskeletal health profiles at national and regional levels, based on inputs from the above local data, national primary care EHR data (Clinical Practice Research Datalink (CPRD)), and auxiliary variables (e.g. area level deprivation) 3. Compare the provision of surgery with estimates of need, by applying the concept of equity rate ratios previously used for total hip and knee replacement, and to map regional variation in shoulder and back surgical procedures **Purpose:** to contribute to a system of musculoskeletal health intelligence in the UK population that provides useful, timely, sustainable, trustworthy evidence for policymakers, practitioners, and the public
Study design	1) Cross-sectional survey (with linked de-identified medical records for consenting respondents) 2) Analysis of national primary care electronic health record data (CPRD) linked to hospital episode statistics data
Setting	General population and primary care 11 general practices in North Staffordshire & Stoke-on-Trent
Population/participants	(i) Census sample of adults aged 35+ years consulting participating general practices in the 12 months prior to survey administration (ii) Random sample of adults aged 35+ years registered with participating general practices in the same period
Keywords	dataset; musculoskeletal; survey; cross-sectional; prevalence; primary care; pain; work; disability; low back pain; osteoarthritis; shoulder pain; knee pain; function; inequalities; comorbidity
Ethical approval	Ethical approval was obtained from the North West - Greater Manchester East Research Ethics Committee (Reference: 15/NW/0735) Use of CPRD data approved by Independent Scientific Advisory Committee (refs 18_014 and 18_183)
Contributions	Dahai YU conducted data cleaning and undertook the primary analysis of data. Liz HARTSHORNE provided project management. Stephen HARPER and Jo BAILEY designed the databases. Charlotte CLEMENTS contributed to survey administration. Tracy WHITEHURST and Simon WATHALL contributed to survey administration and the process of extracting linked medical record data for consenting respondents. James BAILEY performed linked medical record cleaning and management. West Midlands (North) CRN supported the study recruitment.

Data available for sharing	Individual de-identified survey questionnaire data from **8252** respondents aged 35 years and over (4528 MSK consulters; 4467 general population (743 respondents in both MSK consulter and general population sample))
Access to data	The individual de-identified data of questionnaire responses from the cross-sectional survey are not uploaded onto the Keele Research Data Repository but are available on request (primarycare.datasharing@keele.ac.uk) in accordance with Keele's data sharing policy. There is no access to the EHR data. The following meta-data files are freely available through Keele Research Data Repository: • Study protocol • Patient information leaflet • Survey instrument (full blank, minimum data blank, full coded*) • Participant flow • Data dictionary * Note the some instruments may require approval from the instrument developers
Associated datasets	PRELIM survey data are potentially combinable with other similar cross-sectional surveys undertaken by Keele University, notably PRELIM_Pilot and HILL.