Table S1: Morbidity definitions

Morbidity	Definition
Musculoskeletal disorders	Any morbidity within the Musculoskeletal and connective tissue diseases chapters of Read Code (Chapter N - for UK) or ICD-10 (Chapter M – for Sweden) systems
Osteoarthritis	Osteoarthritis and Allied Disorders excluding axial osteoarthritis
Joint pain	Codes synonymous with osteoarthritis in older adults (knee, hand, hip, foot/ankle pain)
Low back pain	Non-specific low back pain Including: Low back pain, Loin pain, Low back strain, Lumbago, Lumbago with sciatica, Dorsalgia unspecified, Backache Excluding: Known cause e.g. Intervertebral disc disorder, Infection, Lordosis, Injury
Rheumatoid arthritis	Rheumatoid arthritis Excluding: Juvenile rheumatoid arthritis, Rheumatic fever, Seronegative arthritis, Inflammatory polyarthropathy
Spondyloarthritis	Inflammatory spondylopathies Including: Ankylosing spondylitis, Psoriatic arthritis, Arthropathy in ulcerative colitis, Arthropathy in Crohn's disease
Ankylosing spondylitis	Ankylosing spondylitis Excluding: Juvenile ankylosing spondylitis
Psoriatic arthritis	Psoriatic arthritis