

BeWell MSK

Background

Osteoarthritis (OA) is the most common musculoskeletal condition in older people and poses a large burden to the health and social care system. Osteoarthritis can develop in any joint in the body, but when it affects the knee or hip, mobility can be affected leading to disability.

Over 6.5 million people have sought treatment from their GP for OA of the hip and knee. Almost all (98%) of initial knee replacements are due to osteoarthritis.

There are several risk factors for the development of osteoarthritis including increasing age, gender, genetic factors, and previous joint injury. The largest modifiable risk factor is obesity.

Given the projected increases in obesity, and the growth and ageing of the population the proportion of people affected by osteoarthritis is expected to rise.

Osteoarthritis in Hips and Knees - Wigan Picture

Data from Arthritis Research UK estimates that a total of 28,133 people aged 45 or over in Wigan live with knee osteoarthritis. This means that of the total Wigan population aged 45 years or over, 20.2% are estimated to have knee osteoarthritis (overall prevalence). This is higher than the overall England prevalence of 18.2%.

Of the total number of people with knee osteoarthritis, 12,478 are male (male prevalence 18.4%) and 15,655 are female (female prevalence 21.8%).

It is estimated that there are 9,990 people with severe knee osteoarthritis, which is 7.2% of the population aged 45 years or over.

In 2011-12 there were 404 knee replacements (3 per 1000 people over 45 years) for people living in Wigan at a cost of £2,524,190.

It is also estimated that a total of 16,416 people aged 45 or over in Wigan live with hip osteoarthritis. This means that of the total Wigan population aged 45 years or over, 11.8% are estimated to have hip osteoarthritis (overall prevalence). This is higher than the overall England prevalence of 10.9%.

Of the total number of people with hip osteoarthritis, 5,900 are male (male prevalence 8.7%) and 10,516 are female (female prevalence 14.7%).

It is estimated that there are 5,106 people in Wigan with severe hip osteoarthritis, which is 3.7% of the population aged 45 years or over.

In 2011-12 there were 358 hip replacements (3 per 1000 people over 45 years) for people living in Wigan at a cost of £2,062,081.

You can see from the data above that the cost of hip and knee placements is around £4.5 million a year.



Be Well MSK/Pain Management pathway.

Traditionally within Wigan we have worked closely with clinical teams within secondary care this reflects in the data below (referral source). Appendix 1 shows our wider pain management offer including water-based classes, back rehab, Pilates, and tai chi.

Across all Be Well programmes in 2022, 21% of all referrals reported Musculo-skeletal as a condition.

On the Long-term condition programme, we had a total of 2074 referrals (2022), of which 765 (37%) identified MSK (Pain/Injury) and 489 (24%) identified Arthritis as their primary medical condition. 225 (11%) had both on their medical history.

Analysis of these 1029 unique referrals, shows 783 had a first contact with the Be Well team, of these 191 did not take up the programme. Of the 592 that did engage, 450 (76%) completed the programme.

Referral Source

•	MSK/CATs	371 (36%)
•	Self -referral:	205 (20%)
•	First Contact Physiotherapists	151 (15%)
•	Primary Care:	90 (9%)
•	Community Link Workers and Health Advisors:	82 (8%)
•	Other clinical teams:	130 (12%)

Move towards a proactive approach – FCP Delivery Model

In Sept 22 we started to look at a more proactive approach and look to engage with residents earlier on and prevent them entering the pain/medication cycle.

Wigan's hidden opioid crisis is revealed | Wigan Today

We wanted to place ourselves at the front end of pain management and identify first instances of pain. NICE make recommendations about the diagnosis, treatment, and care of people with osteoarthritis. These recommendations include holistic assessment of people with osteoarthritis and core treatments which include activity and exercise, and weight loss if the person is overweight or obese.

We wanted to embed Be Well into this holistic assessment.

We saw the role of the First Contact Physiotherapists as an ideal opportunity to change the way we tackled this issue and the perfect enablers. The vast majority of musculoskeletal first contact practitioners are physiotherapists with enhanced skills. They can help patients with musculoskeletal issues such as back, neck and joint pain by:

- assessing and diagnosing issues
- giving expert advice on how best to manage their conditions.
- referring them onto specialist services if necessary.



Patients with back and joint pain, including conditions such as arthritis, can contact their local physiotherapist directly, rather than waiting to see a GP or being referred to hospital.

The delivery model was designed to align the FCP leads with Be Well Wellbeing Specialist instructors (see table below) across the 7 PCNs. Referrals were assigned directly to the WSI from the FCP and contacted in a timely manner.

The teams have been meeting at our leisure centre sites to visit classes and see facilities, with the aim for the clinical team to be based on within Be Well facilities.

PCN	Be Well Lead	FCP Lead	FCP Team
Wigan North/Central	Nic Blackhurst	Nathan Briganti/Sarah Titherley	Gareth Eves Dave Weldon Pete Cuddy Clare Holden Helena Bond (mat leave) Danielle Mills Ed Silk
TABA+	Alex Meadows	Glen Davies	John Kilgallon Stephanie Limbert
SWAN	Glen Tither	Laura Higginson	Tom Smith Callum Watt Charlotte Barker
Leigh	Alex Meadows	Fiona Deighan (Victoria Rimmer MAT leave)	Andrew Smillie Shane Smith Pinal Mashru George Thombs
LIGA	Glen Tither	Vinayak Kshirsagar	Daniel Parkinson Shraddha Date
Hindley	Joe Davies	Fiona Deighan	Chris Saxon Jack Coxon Karl Humphreys

We utilised our wider Be Well physical/nutritional opportunities to support participants including our strength and balance/weight management programme/leisure offer.

More specifically we delivered the ESCAPE Pain Programme (EP), an education and exercise intervention within our leisure centres. This is a six-week intervention for people with knee and hip osteo-arthritis (OA), which Wigan has a higher rate of than other GM areas.

Delivered in 12 sessions, twice weekly, it incorporates a progressive exercise circuit (40 min) and an educational component (usually the last 15-20 mins). The aim of the programme is to reduce pain in the joints and increase mobility and function.

We wanted to evaluate lifestyle factors such as mental health and physical inactivity and more importantly its impact on musculoskeletal health with specific questionnaires (HOOs and KOOS).

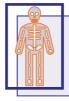


Key Outcomes and Successes

The infographic below highlights the impact since starting the new pathway in Sept 22. Including increasing physical activity levels (IPAQ - a physical activity questionnaire looking at vigorous, moderate, walking) and improvements in mental health score (WHO-5)



Each of the 7 Primary Care Networks (PCNs) and FCP leads are now aligned with Be Well.



We are engaging with residents earlier on and in some cases their first presentation of MSK/Orthopaedic conditions.



Since Sept 22, there have been 283 referrals across all PCNs compared to 16 in 2021.



Participants have seen their physical activity score (MET mins/week) increase on average by 12%



Insight work from WWL shows a saving of 0.45 primary care appointments per patient per year, a 2% reduction in hospital cost and a 2.3% reduction in medication cost.



The average WHO-5 score increased by 33%. Patients who have anxiety on their clinical record have 58% more repeat medications, 44% more admissions and 50% more GP appointments.

Specific data from Escape Cohorts

We mentioned the Escape Pain earlier in our model and we deliver 5/6 cohorts per year at 2 sites across the borough: Robin Park Sports Centre and Leigh Leisure Centre (10-12 per year). We have had **305** attendances at our EP cohorts since the start of our work with the FCPs (Sept 22).

We collected pre and post outcome questionnaires for specific OA measures, HOOS (Hip dysfunction and Osteoarthritis Outcome Score) and KOOS (Knee injury and Osteoarthritis Outcome Score). Questionnaires to determine if a participant has decreased pain and increased function and mobility. The higher the score the more improvements that have been made.



For those that completed baseline and post evaluations we saw increases for both the Hip and Knee outcome scores



HOOS baseline **66.2** increased to **71.5** post.



KOOS baseline **68.7** increased to **72.1** post.



This coupled with the increased IPAQ scores from the infographic suggest a significant impact on the participants. Often introducing PA to those with hip/knee pain and dysfunction can lead to a short-term increase/worsening of symptoms.

A functional test (30 second sit to stand test) testing leg strength and endurance was completed at baseline and post cohort. The average score increased from 9.5 to 13.5, a 42% increase in functional capacity.

Appendix 2 highlights some testimonials from participant's that have recently completed the Escape Pain program at Leigh & Robin Park Leisure Centres. You will see from the comments and test results that pain, function, strength, and mobility have improved over the 6-week period. Some have managed to reduce the amount of medication they need to take. Others have lost weight and are able to do day to day tasks easier. But most of all, everyone has enjoyed the course and built more confidence. This course has taught participant's the skills and tools needed to be in control and allow them to self-manage their condition long term. Most of the participants that complete the course have moved into other activities in our local leisure centres and community sessions across the Wigan Borough.

Future Plans

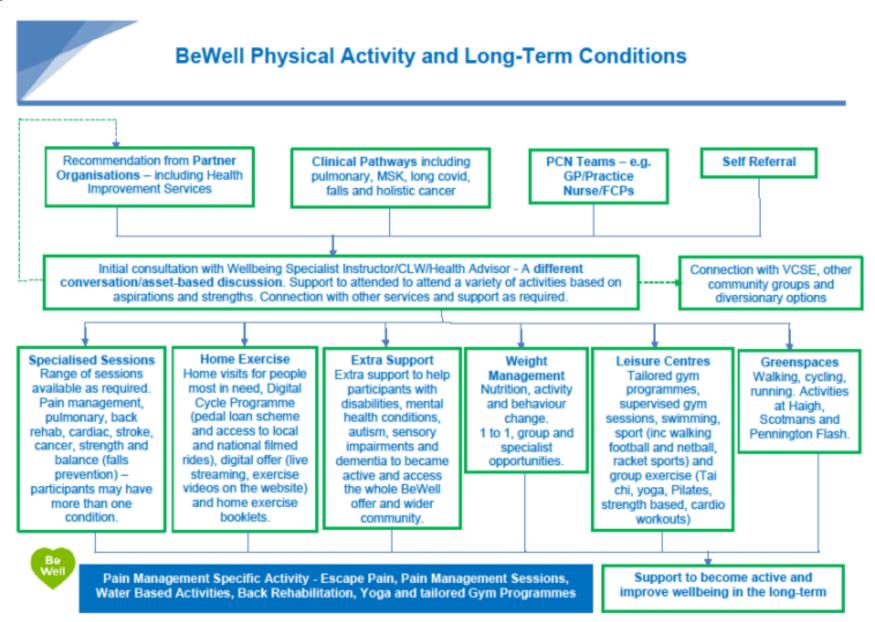
We are working closely with two of the FCP leads to look at a preventative strength programme. A key piece of integration work that also falls across the Active Ageing programme. Looking at how we can encourage people to take part on progressive strength training, that will feed into our Leisure and Wellbeing offer.

We currently have a waiting list for both EP cohorts so ideally, we want to increase the number of classes we deliver at other leisure/community venues. We also want to provide workshops for the wider wellbeing and leisure teams to include hip and knee strengthening exercises as part of their delivery plan. This also includes the education component that is essential is empowering our participants. The opening of the proposal stated that Obesity is the largest modifiable risk factor for people with OA, so we want to integrate with our weight management programme and address other lifestyle factors such as nutrition.





Appendix 1





Appendix 2 - Testimonials

John - Age 67

KOOs Score: Pre 44.9 Post 65.9

Sit to stand: Pre- 11 Post 14

'Well as I had never done any formal exercise before, this was a brand-new experience that introduced choices and options I realised I could do at my age. As a result, my fitness and confidence has improved, and I will be starting at the gym next week so really it was a good experience. I have not been taking pain tablets as often, and I have felt enough benefit that I am going to continue with exercise. It was a nice group with a knowledgeable instructor.'

Julie - Age 60 (referral source Steph Limbert FCP TABA+)

KOOs Score: Pre 70.7 Post 70.8

Sit to stand: Pre 8 Post 13

'Alex was very knowledgeable and approachable as was his colleague Ade who also covered the class. They understood our needs and the routine exercises seemed quite simple but as far as I'm concerned, we're effective. I could feel the difference after a few weeks. I am walking more evenly, more upright and feel generally more stable. Even Roger Conlon at Leigh Musculoskeletal service can feel the improvement in his resistance tests. I would recommend these sessions to start the self-management process so the correct exercises can be continued from home or a gym depending on a person's circumstances.'

Roy – Age 79 (Referral source Danielle Mills – FCP Wigan North)

HOOs Score: Pre 52.9 Post 61.8

KOOS Score: Pre 47.4 Post 65.9

Sit to stand: Pre 9 Post 10

'I particularly enjoyed the Tuesday and Thursday Escape Pain sessions over the last few weeks. Frankly I feel that it would be almost impossible to improve on these. The timing and content were spot on. I also enjoyed my first gym session with Alex at Standish Leisure Centre and I'm sure I will use this regularly.'



Vanessa - Age 53

HOOs Score: Pre 52.3 Post 64.6

KOOs Score: Pre 44.9 Post 59.3

Sit to stand: Pre 10 Post 18

'I feel like the course really benefitted me not only physically but mentally with the support offered too.

Alex was a very positive instructor and not at all judgemental.

He explained all the benefits of exercise and healthy lifestyle and encouraged us all to be the best we can be, and not to compare to others.

If I was ever approached for another class, I would definitely take up the offer.

Thank you to Alex for his support and energy and thanks to BeWell Wigan for allowing me to do the course. I feel like the pain in my knee and hip are more under control and the weight loss I have achieved since January has helped too.

If anyone is unsure of the benefits of the classes, I would say give it a go.'

Delivery Staff Testimonial

"Our MSK pathway has progressed at a rapid rate over the past 2-3 years. The relationships we have built with the FCPs and MSK physios has allowed us to focus on direct referrals, meaning less wait times and a much smoother transition into our BeWell services.

The feedback I have had from the FCPs in Leigh and Taba + has only been positive. They are very impressed with the variety of sessions we have on offer. The increase in FCP referrals, really shows how well this pathway is going, and how we are now being seen as a preventative solution for MSK patients.

The Escape Pain program is something I have delivered for 4years now, and it's still my favourite session to teach. It is so much more than just an exercise class. The education sessions we do at the end of the session, gives that little bit more and all our participant's seemed to get so much from them. The results we get after every cohort really do speak for themselves. The confidence that participant's build after the 6weeks, really does make this one of the best programs we deliver".