



Integrated Care Systems

CASE STUDY

A personalised approach to health inequalities for people with back pain in Coventry

Coventry Central Primary Care Network (PCN) and University Hospitals Coventry and Warwickshire (UHCW) NHS Trust.

Summary

People with musculoskeletal problems living in the most deprived areas of Coventry were identified for more support using population health management approach. The trial, run by Coventry Central PCN and University Hospitals Coventry and Warwickshire (UHCW) NHS Trust, identified a group of working age adults with chronic low back pain, living in deprivation, with co-morbidities and on opioid medication who are currently not working.

On average, this group see the GP 32 times a year with lots of additional tests and appointments with secondary care. Results for the 150 people identified so far have shown reduced pain and disability levels and previous clinical trials have shown this approach to be clinically and cost-effective. The trial will run a second cohort and potentially rolled out further.

Aim of the project

The primary aim of the project was to narrow health inequalities and improve the health and well-being outcomes for people with persistent low back pain living in the 20% most deprived areas of Coventry. We wanted to reduce low value care including opioid prescription medications, imaging requesting and cascades to specialist appointments, and improve physical and mental health outcomes for people with chronic back pain.

The approach

Local clinical knowledge highlighted the significant impact of back pain on people living in our local area who are adversely affected by deprivation and health inequality. The PCN and local NHS providers worked in partnership to create a 'snapshot' dataset linking GP, community and secondary care data for all patients registered with the PCN. This linked dataset could be filtered by patient demographics and diagnostic codes and showed each patient's history of accessing NHS services.

The dataset helped us to identify a group of working age adults with chronic low back pain, living in deprivation, with co-morbidities and on opioid medication who are currently not working. On average, they see the GP 32 times a year with lots of additional tests and appointments with secondary care.

Living with persistent back pain results in low confidence to engage in meaningful work, social, family and leisure activities and has an enduring impact on mental wellbeing. This group have poor health outcomes and increasing reliance on healthcare and other statutory support including heavy opioid prescriptions, regular GP and hospital attendances.

Our project was led by UHCW NHS Trust physiotherapists, working in partnership with the Central PCN.

We decided to take a holistic approach that de-medicalised persistent low back pain and specifically targeted its biopsychosocial complexity.

Patients were offered an individualised, physiotherapist-led combined physical and behavioural treatment programme called Cognitive Functional Therapy (CFT). CFT is an evidence-based approach that considers the multiple factors that influence outcomes.

Each patient was given an initial 90-minute physiotherapy assessment and up to four 30 minute follow-up appointments. We took each person through a very personalised approach, targeting something they would like to be able to do but had been afraid of, such as bending or going for a walk.

The challenges

Few evidenced-based interventions have been used to target health inequalities in populations of people with persistent back pain ⁽¹⁾.

The key challenge to date is gaining the trust and confidence of the people invited to take part in this programme. These people have lived with high impact pain for many years and they felt low optimism for their future outlook as healthcare had not been able to help them in the past.

The results

Providing a physiotherapist-led physical and behavioural approach, with multidisciplinary input when required, we were able to find alternative methods to managing pain and reduce opioid medication.

The intervention has shown consistent reductions in pain and disability levels for people with persistent low back pain. Previous clinical trials have shown this approach to be clinically and cost-effective and it has been successfully tested in an NHS setting ⁽²⁾.

“After my very first session in this programme I was optimistic about my future. For the first time I was able to control my pain. This was not something being done to me by somebody else or medications to mask the pain. I now understand that it is not one thing that causes me pain but a combination of things which all relate to each other. I am already walking more, standing up from a chair easily without pain and getting more housework done. I even danced last weekend for the first time in 9 years. I feel that this holistic approach may be the thing that allows me to finally get my life back”.



Jane
Patient

We are using a range of patient reported outcomes to evaluate the intervention including pain, disability, quality of life and psychological measures including self-efficacy, stress, mood and anxiety.

We will also complete a future economic evaluation regarding Primary and Secondary Care appointment use, imaging requests and prescription costs.

Learning points

We recognise the importance of engaging with people extensively within their own communities. In the future, we would like to understand what the lived experience of persistent pain is in more depth for people living in areas of deprivation, with low income, with multiple long-term health conditions, taking opiate medications and how we can collaborate to improve the care we provide.

We would like to strengthen links within these communities and with the Local Authority to improve access to supporting services. We also recognise the importance of communicating information using different methods, media and in multiple languages that is accessible and understandable to our service users.

Next steps

The Coventry and Warwickshire Integrated Care System health inequalities programme has funded the next phase of this project that will see this intervention provided to a further 150 people. The intervention will be evaluated with a view to wider scale up if successful.

This will include a comprehensive training programme in Cognitive Functional Therapy for physiotherapists to be able to deliver the intervention to a competency standard. We will need to evaluate further aspects of this evolving model of care such as introducing clinics in community settings, working more closely with community leaders, local authority and other health professionals including clinical pharmacists, psychologists, healthy lifestyle coaches and social prescribers. We intend to build relationships and partner with leisure services and facilities in Coventry to evaluate the scope of delivering clinics within the community.

We will embed a mixed methods research programme to evaluate the clinical and cost effectiveness of the intervention longer-term and to understand the perspectives of stakeholders.

References

1. Versus Arthritis. Unequal, unseen and unfair: Chronic pain in England. 2021; Versus Arthritis. <https://www.versusarthritis.org/news/2021/june/unseen-unequal-and-unfair-chronic-pain-in-england/>
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2. Kent et al (2023). Cognitive functional therapy with or without movement sensor biofeedback versus usual care for chronic, disabling low back pain (RESTORE): a randomised, controlled, three-arm, parallel group, phase-3, clinical trial. The Lancet May 2023. [https://doi.org/10.1016/S0140-6736\(23\)00441-5](https://doi.org/10.1016/S0140-6736(23)00441-5)