

"I was diagnosed with Parkinson's in 2000 at the age of 47. At that time nothing was mentioned about the relationship between Parkinson's and osteoporosis. In 2016 I was referred to a consultant regarding pain in my knee. I had bone scans and osteoporosis was diagnosed. At this time I was extremely thin, about 6 1/2 stone and 5 foot tall. I also do not eat meat or fish, so I believe by looking at me and looking at my diet one could've seen that I was at risk of developing osteoporosis" - Elaine

People with Parkinson's are more than twice as likely to have osteoporosis and are twice as likely to have a fracture than those unaffected. Around 50% of these are hip fractures. 50% of people with Parkinson's report falling more than once during a 3-month period and 13% report falling more than once a week.¹ Fractures are a major cause of emergency hospital admission for people with Parkinson's. People with Parkinson's are more than twice as likely to be hospitalised due to a hip fracture.²

Despite this, many people with the condition are not routinely assessed for fracture risk. The UK Parkinson's audit has shown that rates of assessment of fracture risk are generally low (47.6% of patients in 2019) and there has been no significant improvement in the last three audit rounds.

We know that these fractures have a serious impact on long-term outcomes and quality of life for people affected by Parkinson's.

"It was only after suffering two broken hips, a broken foot and a fractured shoulder due to Parkinson's-induced falls that an orthopaedic surgeon suggested that there might be a link and duly ordered a DEXA scan, which led to my subsequent diagnosis with osteoporosis. I have heard similar stories from fellow people with Parkinson's who have suffered multiple falls/fractures" - David

¹ Tornsey, K. et al. (2014). Bone health in Parkinson's disease: a systematic review and meta-analysis. *Journal of Neurology, Neurosurgery and Psychiatry*, 85(10).

² Low, V. et al. (2015). Measuring the burden and mortality of hospitalisation in Parkinson's disease: A cross-sectional analysis of the English Hospital Episodes Statistics database 2009–2013. *Parkinsonism & Related Disorders*, 21.

What are we trying to achieve?

We want elderly care and neurology services to join a UK-wide initiative to improve bone health for people with Parkinson's. Using an [algorithm designed to manage fracture risk in Parkinson's](#), we want to ensure that all patients are assessed and those who are eligible are referred for investigation(s) and started on treatment.

The algorithm has been translated into an on-line tool, and services will enter anonymous data on each patient.

Who can take part?

This project is open to all elderly care and neurology services that took part in the 2019 audit and have submitted a Service Improvement Plan. Services that took part in the 2017 and 2015 audits may also be considered.

What will my service need to commit to?

Services will set up a local project team including colleagues involved in fracture risk assessment, bone density imaging, the provision of lifestyle advice and treatment options.

Services will use the tool to systematically assess people with Parkinson's for fracture risk and will enter anonymised data on assessment, referral and treatment for each consecutive patient on an on-line database. The assessment for each patient takes from 3-5 minutes to complete.

A small grant will be available to each participating service to support the process of data collection and submission to the online system, with more money available to those who collect more data. Data collection will be open for six months. Any participating service will be required to collect data on at least 20 patients.

Quality improvement and expertise on bone health will be provided to the project by the team at Parkinson's UK and clinical leads in this area. As the initiative progresses we will also bring teams together to share learning on the implementation of improvements.

The Parkinson's UK audit team will carry out the data analysis. Participating services will get a report of the national findings, in relation to findings from their own service.

Timescales

Five pilot sites will start data collection in August 2021. After feedback from these services, it's expected that the remaining Phase 1 sites will start data collection in October 2021. These sites will receive their report before data collection begins for the UK Parkinson's Audit in 2022.

A second phase of the project for additional services will take place in 2023.

How can I sign up?

When you complete your Service Improvement Plan you can indicate your interest by ticking the appropriate box - we will then be in touch. If you have already submitted a plan, but now wish to join this project, just drop us an email.

If you have any questions about this project, do please contact audit@parkinsons.org.uk