

# A QUALITY IMPROVEMENT PROJECT TO INCORPORATE ROUTINE BONE HEALTH ASSESSMENT INTO A PARKINSON'S CLINIC

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## Introduction

People with Parkinson's (PWP) are twice as likely to fracture and over twice as likely to develop osteoporosis (1). This impacts overall quality of life and increases the risk of morbidity (1). **Assessment of bone health is often overlooked in clinic**, as reflected in the 2015 UK Parkinson's Audit (2), deeming it a **priority area for improvement**.

**Aim: Our project focuses on implementing routine bone health assessment for PWP in clinic, to achieve better standards of care**

## Results

The retrospective analysis showed that 61.7% (n=87/141) of patients required bone health intervention. Of these patients, 41.4% required vitamin D supplementation. 40.2% required bone density measurement. 18.4% required bone strengthening treatment. This was subsequently initiated.

When implementing the bone health proforma, issues identified with patient-administered forms (n=8/30) were physical difficulty in completing forms and confusion around medical terminologies, which clinician led administration (n=14/30) could support. HCA's (n= 8/30) required MDT support to complete forms.

### HCA LED

- HCA's can provide clarification of terminology
- HCA's differ on their medical knowledge and require training
- Staff shortages deem HCA approach impractical
- 2 step approach

### PATIENT LED

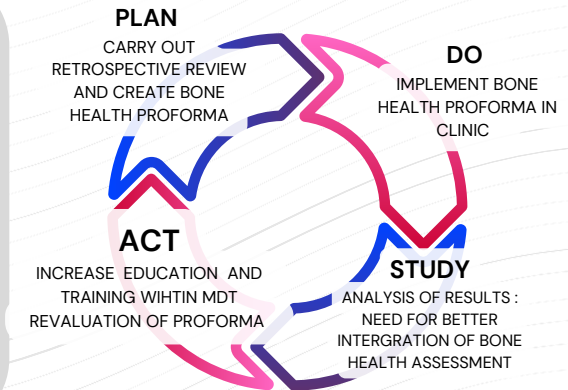
- 75% of patients gave to a relative or partner to fill out, of these 66.7% said would struggle physically
- Required clarification of terminology
- 50% would prefer clinician led
- 40.9% unsure about their weight

### CLINICIAN LED

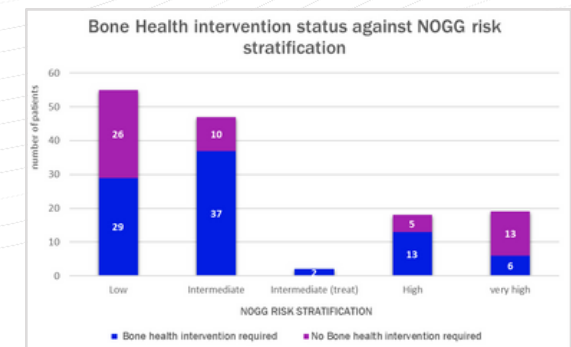
- 1 step approach from input of results to analysis
- Access to medical records
- Importance of bone health management can be explained
- Ensures better clarification and communication to patient

## Methods

This was a 12-week medical student led project, supported by the specialist multi-disciplinary Parkinson's team (MDT) in Cardiff and Vale. To establish baseline current practice, a retrospective fracture risk assessment was completed for 141 patients using the Bone-Park algorithm (1). To screen bone health, we developed a bone health proforma, incorporating the FRAX (Fracture Risk Assessment Tool). We trialed proforma integration in clinic, by gaining patient feedback and analysing logistics. Administration was done in a patient, healthcare assistant (HCA) and clinician led format. We then evaluated which was the best method of administration based on multiple factors.



Our bone health proforma



retrospective analysis (n=141), where NOGG= National Osteoporosis Guidelines Group (NOGG) guidelines

## Conclusions

As PWP have an increased fracture risk (1), our results provide **compelling evidence that routine bone health assessment should be better integrated into Parkinson's management**. Clinician led administration of our proforma was the best model of integration. This was based on patient preference, a reduction in duplication and improved accuracy. Further bone health education is needed within our MDT, which we aim to incorporate through our Parkinson's web application.