

Promoting Bone Health by ensuring in-patient bone health plan in patient notes after Neck of Femur Fracture.



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Conclusions

Providing guidance and education to rotating doctors improved Geriatrician-led bone health planning resulting in all eligible patients commencing bone-protective medication and total numbers above the national average.

Future digital integration could automatically populate the bone health plan into the discharge summary which would reduce duplication of work and increase proportion of patients discharged with clear bone health plan recorded.

Introduction and Aims

- Osteoporosis affects 3 million people in UK with more than 500 000 hospital admissions annually due to fragility fractures costing in excess £4.4 billion to the NHS².
- Bone protection medications are a cost-effective way of reducing fractures after a fall².
- The Royal College of Physicians National Hip Database targets that patients are “given suitable bone strengthening treatment and followed up to ensure they are still receiving this protection 120 days after a fracture”¹.
- Lewisham achieves this in only 22% of patients against a national average of 35%¹.

Example Bone Health Plan in patient records:

Bone Health Plan

1. FRAX⁴:

BMI 27.3; Risk major osteoporotic fracture 25%, hip fracture 9.3%. NOGG guidance: treat³

2. Vitamin D: 63, Adjusted Ca 2.3

Consultant-led Plan

For bisphosphonates.

Commence Alendronic Acid 70mg weekly 14 days after surgery.

Patient has been referred for DXA scan and outpatient appt.

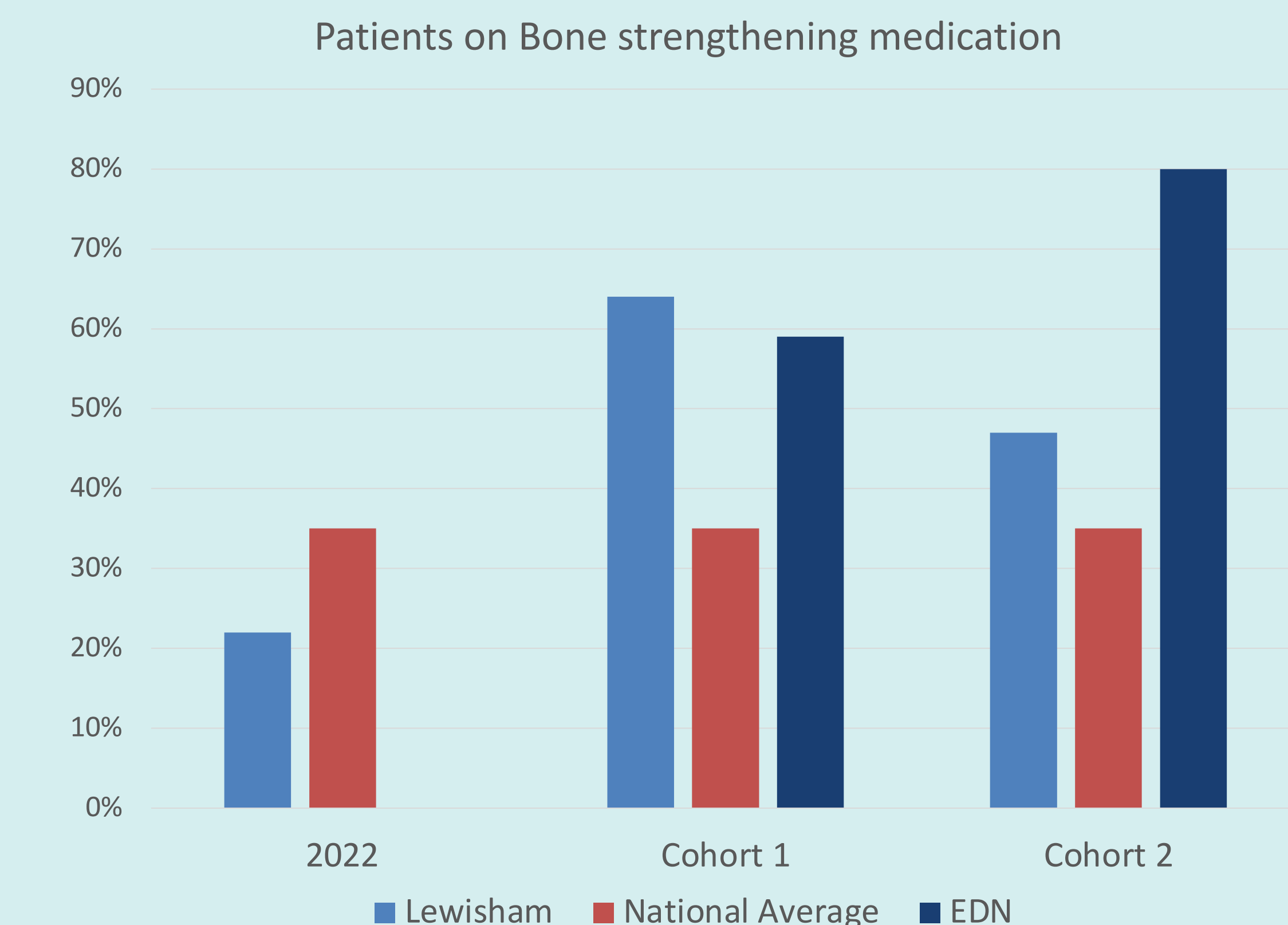
Patient has been commenced on Colecalciferol for Vit D and calcium supplementation.

Method

- Data was collected for patients over the age of 65 with a neck of femur fracture (NOF).
- Cohort 1 was collected from 01/01/2023 to 28/02/2023 and there were 22 eligible patients.
- Cohort 2 was collected from 01/03/2023 to 31/05/2023 and there were 16 patients.
- It was identified whether an appropriate bone health plan including FRAX and Vit D and Vit D/ Calcium supplementation was recorded in medical notes and Electronic Departure Note (EDN).
- Interventions included an advice sheet for rotating doctors, additional education at induction and a bone health proforma for medical notes and EDNs.

Results

- 86% patients in Cohort 1 had bone health plans in their notes and 59% in their Electronic departure notes (EDNs).
- 64% commenced on bisphosphonates with 1 eligible patient (4.5%) not receiving medication. 31.5% (7 patients) were assessed as ineligible for bone protective medications (eg due to renal dysfunction or short prognosis)
- After providing guidance to new rotating doctors over putting a bone health plan in all patient notes following a neck of femur fracture:
- 46.7% of cohort 2 started on bisphosphonates which equated to 100% of patients appropriate for bone health medication; and
- 80% patients had a bone health plan in their EDNs.



References

1. National Hip Fracture Database The National Hip Fracture Database (nhfd.co.uk)
2. NICE impact Falls and Fragility fractures report <https://www.bgs.org.uk/sites/default/files/content/resources/files/2018-08-29/NICE-impact-falls-and-fragility-fractures.pdf>
3. NOGG – National Osteoporosis Guidelines Group UK Summary of main recommendations | NOGG <https://www.nogg.org.uk/full-guideline/summary-main-recommendations>
4. University of Sheffield FRAX <https://frax.shef.ac.uk/FRAX/index.aspx>