



Case study: The Provision of Bone Medication- An Improvement Project.
Airedale Foundation NHS Trust
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Background

At Airedale Foundation NHS Trust the provision of bone health medication and follow up was poor, in 2021 we achieved only 6%, by 2022 we had improved to 51.9% but knew we could achieve more, to positively influence future outcomes for our patients.

Motivation came from attending the Royal Osteoporosis Society (ROS) conference in Manchester in 2022 where revised National Osteoporosis Guideline Group (NOGG) guidance to administer intravenous (IV) Zoledronate for all hip fractures was presented. This was seen as an opportunity for improvement and to provide our patients with the gold standard of bone health care.

Aim

To ensure that all patients admitted with major osteoporotic fractures were administered IV Zoledronate or another suitable bone health medication (i.e. other injectables) rather than being given oral bisphosphonates.

Process

The project was led by the Orthopaedic CNS and Fracture Liaison Service (FLS) Nursing Lead who liaised with the Trauma and Orthopaedic multidisciplinary team (including Orthogeriatrician), Pharmacy, Fracture Liaison Clinical Nurse Specialists (CNS) and the Clinical Lead for FLS.

The Clinical Lead for the FLS discussed the proposal with the Yorkshire Bone Health Forum and there was a consensus for post operative administration of IV Zoledronate at day 7.

The proposal was also taken through pharmacy governance at local Drugs and Therapeutic Group and the Orthopaedic Governance meeting.

We reviewed the FLS-DB and NHFD audit data to identify our own adherence to bone health medication and identified a gap in our service provision. This was discussed with the Clinical Lead for FLS and it was proposed we explored how we could implement the administration of IV Zoledronate to inpatients and 120 day follow up as standard practice. We aimed to implement this within 2 months.

Consultation took place with the Orthopaedic Consultants, the Orthogeriatric Consultant, Pharmacy and the Senior Sister on the Trauma and Orthopaedic ward. A proforma was drafted and signed off through governance and once approved the new pathway was launched within the ward teams. It was also included in the clerking proforma for ease of use. 120 day follow up was addressed immediately.

A plan was also put in place for patients who did not receive treatment as an inpatient and to deliver the subsequent yearly infusions to those who had commenced treatment. This involved patients either attending as an outpatient or it being administered in their homes by the Advanced Community Practitioners (exceptional circumstances).

This aspect of the service is supported by the FLS CNSs who discuss the yearly follow up treatment with the patients and other aspects of bone health promotion.

Audit data continued to be reviewed monthly to monitor the impact of the service.

Outcomes

We were successful in our implementation and now our patients receive IV bone health medication as standard. Data from 2023 shows we have achieved 88% compliance in achieving KPI 7. This has been increasing year on year since we started providing this treatment. There has also been a decrease in our crude mortality rate during this time which is currently at 4.9% down from 2022 when it was 7.5%. Although we cannot attribute this reduction directly to this change in practice it may have contributed. Our 120 day follow up is now established, 2022 showed 44.4% compliance rising to 84.6% in 2023, this change has been directly as a result of this project.

The impact on patient care has been brilliant, our patients are now receiving the gold standard of bone health medication, health promotion advice and follow up. Prior to this project we administered traditional oral bone health medication with limited efficacy. This pathway has made bone health available to all patients and significantly improved the standard of care and patient experience.

Clearly communicating the change and the pathway with all staff that need to be aware is key. This ensures that the change happens smoothly and all parties are aware of the benefits to patients.

It is achievable without too many issues, we found it key to have a 'champion' to keep it in everyone's mind.