

Introduction:

Neck of femur fractures (NOFFs) are a clinically significant diagnosis, with 10% of patients dying within one month of diagnosis [1]. There is a strong association between earlier surgery and improvement in postoperative outcomes [2]. Taking anticoagulation can cause delays in patients being operated on. At Homerton University Hospital (HUH), no previous guideline existed to aid specifically in the management of patients with NOFFs on anticoagulation. We created a guideline in order to reduce delays to theatre, in keeping with national guidance (<36 hours to operation).



Method:

We audited all patients in 2020 admitted to HUH with NOFFs taking anticoagulation (n = 14). A guideline was then created, reflecting new national guidance [3] on the management of anticoagulation pre-operatively for NOFF patients. Three PDSA cycles were completed, with repeat audit cycles following dissemination and teaching of guideline to relevant clinical groups.

PDSA Cycle 1: Audit of all patients in 2020 admitted to HUH with NOFFs who were taking anticoagulation
-Guideline created with poster campaign within hospital

PDSA Cycle 2: Repeat audit cycle following initial intervention between April to August 2021

Survey of clinicians involved with the management of patient cohort

Ensure guideline easily accessible to all relevant teams via multiple means, including via the intranet, social media, and hospital handbook

PDSA Cycle 2: Final audit cycle following second intervention from August 2021-April 2022.

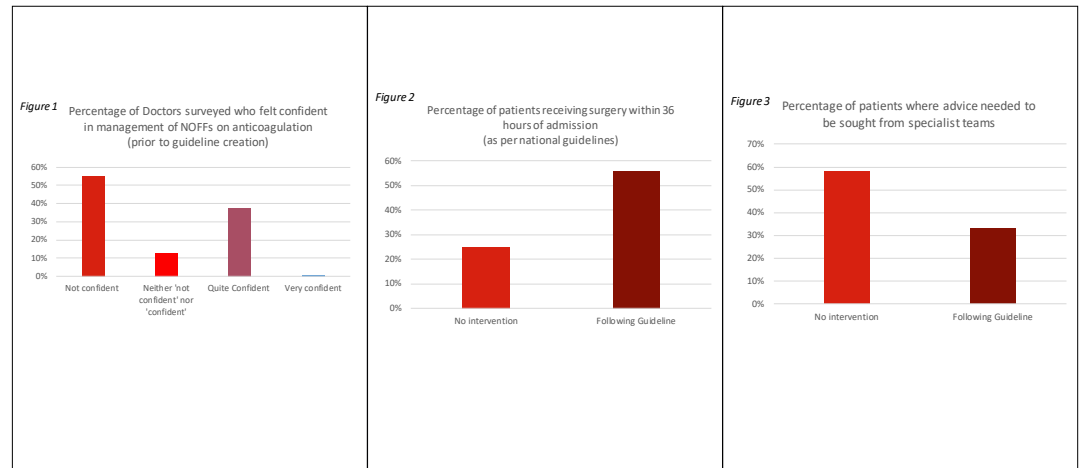


Figure 1: Represents the high percentage of Doctors surveyed in PDSA cycle 2 who felt 'not confident' in managing this cohort of patients

Figure 2: Shows the increase in percentage of patients receiving surgery within 36 hours

Figure 3: Demonstrates how less advice was needed to be sort from specialists following implementation of guidelines

RESULTS

Pre- Intervention	Following Guideline
Inconsistent documentation of anticoagulation administration times	Double the number of patients received their surgery within 36 hours of admission (56% compared with 25%)
Advice sought from range of specialties (orthopedics, hematology, anesthetics, geriatrics)	Range of time taken to have surgery was reduced
Advice given not in keeping with national guidance	Following guideline, advice was sought less often previously (33% compared to 58%)
Doctors not confident in management of these patients, or where to find guideline	Advice was more consistently gained (only from orthopaedic team, rather than multiple tams prior to guideline)

Conclusion:

Implementing a guideline:
Improved patients with NOFFs on anticoagulation getting to theatre on time
Achieved a more consistent management in this cohort of patients
Targeted precise knowledge gaps in this area for clinicians

Next Steps:

There is still a significant delay in patients being operated on who have hip fractures on anticoagulation
To continue improve we need to
Ensure future cohorts of Doctors at HUH use the guideline
Continue audit by comparing our data with a control group of patients

References:

[1] NICE: National Institute for Health and Clinical Care excellence. 'Hip Fracture: Management'. Clinical guideline. Published: 22 June 2011. Accessed at: nice.org.uk/guidance/cg124

[2] Seong YJ, Shin WC, Moon NH, Suh KT. Timing of Hip-fracture Surgery in Elderly Patients: Literature Review and Recommendations. Hip Pelvis. 2020;32(1):11-16. doi:10.5371/hp.2020.32.1.11

[3] Griffiths, R., Babu, S., Dixon, P., Freeman, N., Hurford, D., Kelleher, E., Moppett, I., Ray, D., Sahota, O., Shields, M. and White, S. (2021), Guideline for the management of hip fractures 2020. Anaesthesia, 76: 225-237. https://doi.org/10.1111/anae.15291