

From Imaging Findings to Fracture Liaison Service: are radiology reports for vertebral fragility fractures acted upon?

Dr Henry Conchie¹, Dr Lucy Diss¹, Dr Manos Astrinakis², Dr Matt Ho³, Dr Chris Watura²

¹Radiology Registrar, ²Radiology Consultant, ³Rheumatology Consultant



Chelsea and Westminster Hospital
NHS Foundation Trust



Background

- Vertebral fragility fractures (VFFs) are common yet increasingly under-diagnosed on imaging.
- This is often a missed opportunity to refer patients to the fracture liaison service (FLS) for assessment and prevention of further fractures, at the detriment of patient morbidity and cost to the health service.
- National guidance is in place, which advocates the use of radiology alert systems for ensuring timely signposting of VFF cases to the FLS.

It is incumbent on the full multidisciplinary team to engage with an electronic alert system in order for it to be 'fail-safe'.



Literature Review

Most vertebral fractures do not currently come to medical attention and thus remain undiagnosed

Incidental vertebral fractures have up to 41% risk of developing a further fracture in the subsequent year
Severe vertebral fracture strongly predicts subsequent hip fracture

A previous investigation found that half of radiology alerts for critical or unexpected findings were not acted upon

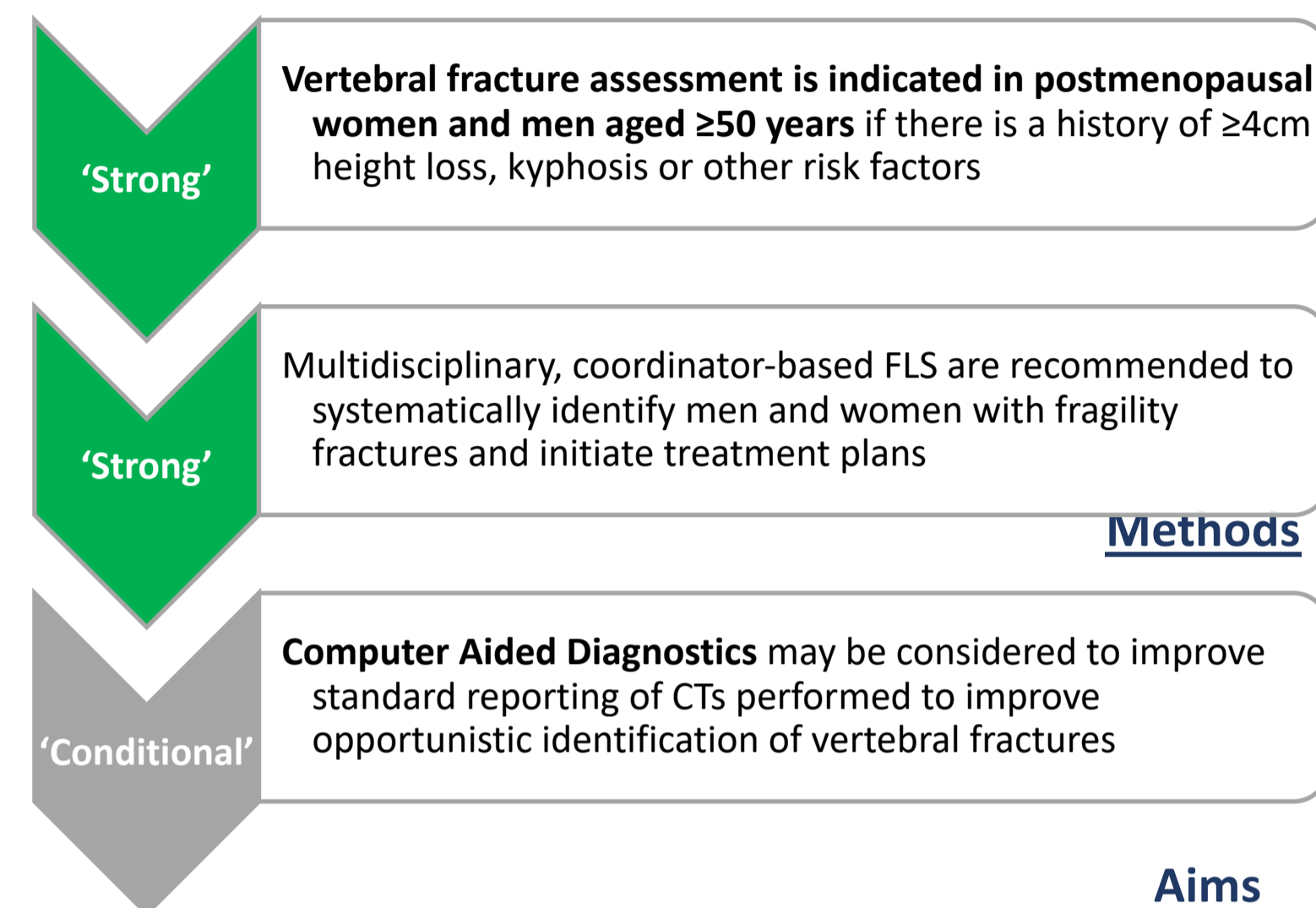
Guidance to be aware of!



Radiological guidance for the recognition and reporting of osteoporotic vertebral fragility fractures (VFFs)



National Osteoporosis Guideline Group (NOGG) ⁹ recommendations



Methods

Aims

1. Identify the number of vertebral insufficiency fractures in radiology reports which include the *****#AFLS***** auto-text
2. Investigate whether these patients reach the rheumatology clinic for assessment
3. Identify areas to improve this patient referral pathway

AUDIT STANDARDS

100% of identified vertebral insufficiency fractures identified in radiology reports to include the required auto-text

100% of patients with auto-text included in their reports to reach rheumatology clinic.

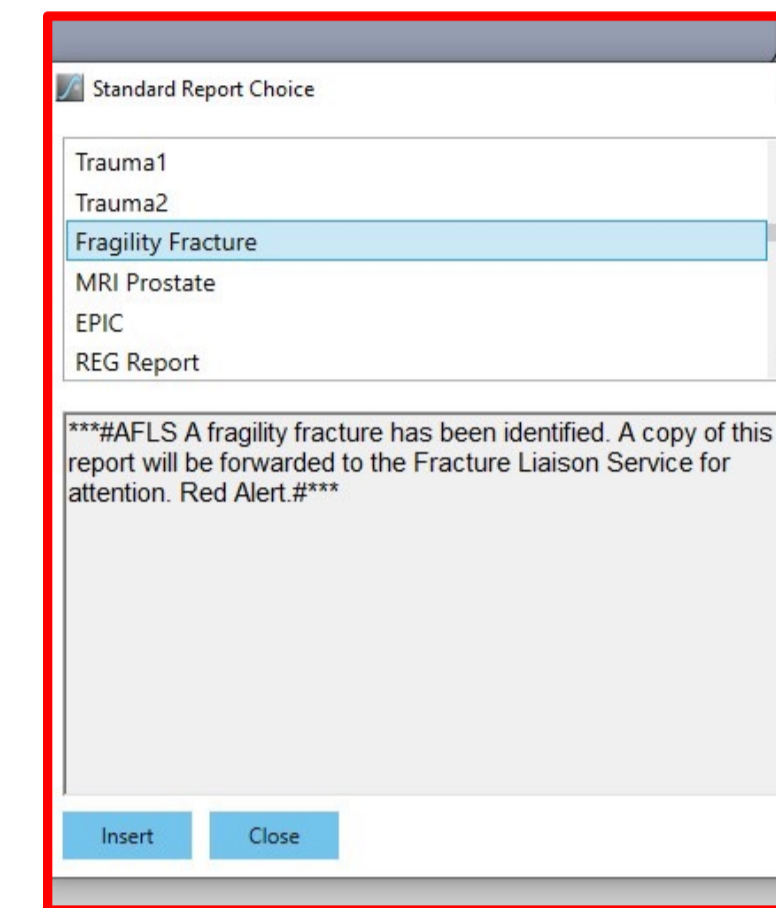
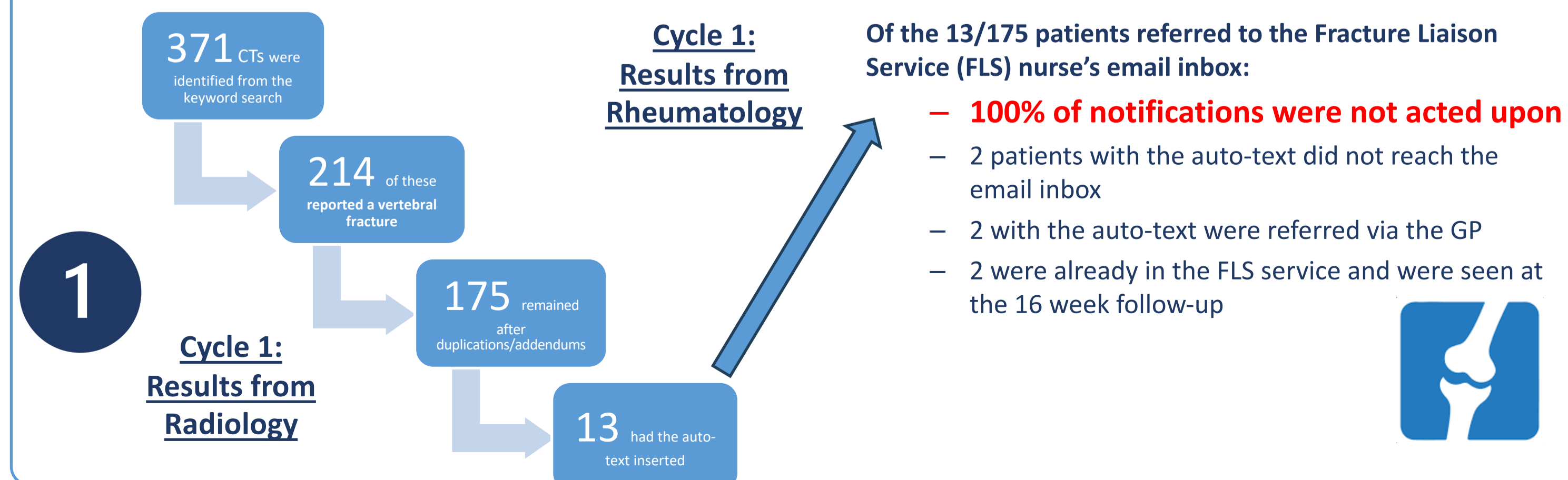
Methodology

Part 1:

- Review radiology CT reports from September 2022- November 2022 to identify those with vertebral insufficiency fractures.
 - Cohort of patients was searched via PACS including specific terminology
 - Patient age group ≥ 50 years male and female

Part 2:

- Review rheumatology clinic records to determine whether these patients have attended rheumatology clinic and outcomes for patients



Improvements made to the FLS service

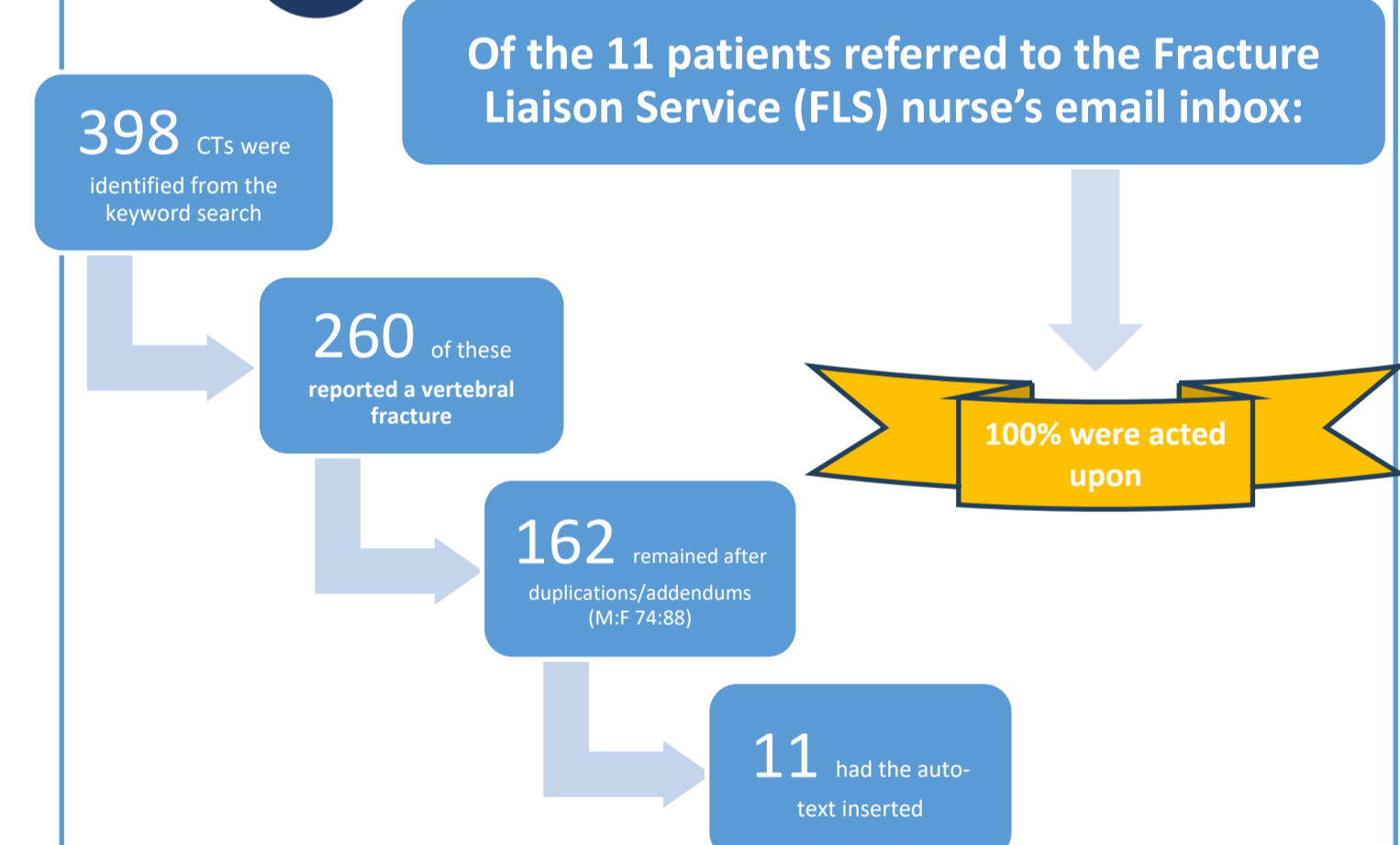
- New FLS nurse appointed who will manage email inbox
- New Rheumatology Consultant
- Designated Care of the Elderly consultant to pick up new/incidental vertebral body fractures and refer to FLS

Improvements within Radiology

Raised awareness of the auto-text within the department:

- clinical governance meetings, email, registrar whatsapp group

CYCLE 2



Conclusions

- Vertebral fragility fractures contribute to significant morbidity and mortality in an increasingly ageing population
- Significant shortcomings were detected in the FLS system on first audit cycle
- After improvements made to the FLS, there is now a robust service to act on our auto-text alerts
- No change in auto-text alert numbers from Radiology between the two cycles

There is still work to be done to increase non-specialist radiologists' and referrers' awareness of the importance of the detection, reporting and appropriate further investigation of VFFs

"Continued efforts by your department to flag these with auto-text is much appreciated and extremely helpful"

Contact details

Presenter – Dr Henry Conchie
henry.conchie@nhs.net

Consultant Rheumatologist

Reference list →

