

# UTILISATION OF A SILVER TRAUMA SCREENING TOOL AT CLERKING

## Improving standardisation and injury detection in silver trauma

**Authors:** Wales L, Shah C, Ketchin A, Jones L. **Affiliations:** Royal Devon University Hospital Trust

### Introduction

- Significant injuries are **often missed in patients >65 years old**
- Low-energy mechanisms of injury such as a fall from standing are often perceived as low risk but can still result in significant trauma.
- Multiple factors such as communication barriers, the presence of distracting injuries, poor historian or a combination can lead to missed or **delayed diagnosis** of significant injuries.
- Missed injuries lead to **worse outcomes**.
- Clear clinical guidance and a structured approach to assessment are essential.
- We have incorporated the **shake, rattle, (rock) & roll** assessment into a screening tool to help standardise assessments for all patients >65 years of age with a Rockwood score >5.
- The tool consists of shake (cervical spine fractures), rattle (rib fractures), rock (pelvic and hip fractures) and roll (lumbar spine fractures) to aid detection of injuries and support decision making for imaging.

### Objectives

Our primary aim is to achieve 50% usage of the screening tool, further standardising the admissions process in silver trauma. Our secondary aim (not assessed this cycle) is to improve injury detection through more thorough initial assessments.

### Methodology

- We surveyed resident doctors' perceptions of Silver Trauma and awareness of the screening tool.
- We then collected data on all Silver Trauma admissions in the Acute Medical Unit from Monday & Tuesday of each week and reviewed the percentage of those who had used the screening tool at clerking.
- Our intervention was focused small teaching sessions with resident doctors, ACPs and PAs to make them aware of the tool, how to do shake/rattle/rock and roll and to improve awareness of silver trauma (Represented by the arrow on run chart).
- Comparison of detected injuries with and without the screening tool usage was not formally measured although this is a future direction of the project.

### Shake Rattle Rock and Roll assessment

#### Shake

Completed   
Result - Normal

#### Rattle

Completed   
Result - Unable to deep breathe or cough

#### Rock

Completed   
Result - Pain in lumbar spine

#### Roll

Completed   
Result - Bruising across L5 region

#### Outcome

For CT trauma scan

#### Don't forget!

Please remember to repeat your Shake, Rattle Rock and Roll with a Stretch and Stroll the day 24 hours in to this admission to re-review for occult injuries, and document in the notes.

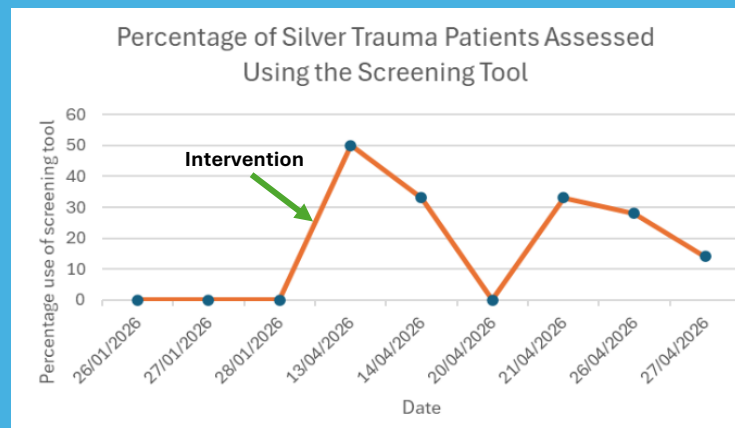
**Silver trauma guideline** can be found on

HUB: <https://royaldevonstaff.nhs.uk/download.cfm?ver=36487>

**Figure 1:** How the screening tool (completed with a mock assessment) looks in the clerking notes. It features the components of the assessment and prevents the note being signed without completion of the assessment due to the wildcards (a feature on EPIC). It links to the trust guideline for silver trauma.

### Results

- Our preliminary survey results showed that 75% of resident doctors considered identifying silver trauma patients important for improving outcomes; however, only 50% were aware of the defined cohort.
- Screening tool use was low, with only 25% reporting prior use.
- Our post-intervention results show overall increased but highly variable usage of the screening tool reaching a peak of 50% usage for a single day.



### Limitations

We did not account for clinicians who incorporated the shake rattle (rock) & roll assessment into their examination without usage of the screening tool. We plan to compare the number of injuries picked up with the tool vs without.

### Conclusion

- Low-energy injuries can still carry high mortality but are often missed due to the perception that low energy equals low risk.
- The silver trauma tool and guideline is to support clinicians to detect injuries in this group.
- Through increased awareness of the tool and guideline, use of shake, rattle, roll increased but needed regular reminders.
- This indicates the need for better dissemination and a change in the culture surrounding the management of this cohort of patients still.
- This will lead to improved patient outcomes through earlier diagnosis and management for significant injuries.
- We plan to check compliance at 24 hours to further increase detection of significant injuries.

