

# TARN

## Flail chest coding change

October 2021

### Background

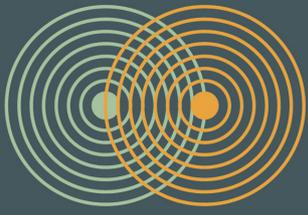
- Whilst clinically important and used broadly to characterize extent of injury and indication for intervention, unification in terminology for 'flail chest' does not exist.
- Language used includes 'bifocal contiguous', 'multiple same site' whilst others utilise numerical quantification. Various descriptions include 'more than one fracture in '2 or more ribs' by some, '3 or more' by others.
- Lately attention has been drawn to this and attempts have been made to reduce variability in description by the Chest Wall Injury Society.
- Like many injury patterns, consensus amongst all stakeholders is not complete.

### Why change?

- Flail chest receives a higher severity score (AIS4+) than multiple non-flail rib fractures in the AIS dictionary.
- TARN has to ensure coding is standardised and that the AIS code conservatively principle is adhered to.
- In order to do so we consulted an expert group of clinicians involved in both the clinical care of, research into and guidelines for chest wall trauma.

### TARN reporting consensus

- The consensus we have derived is that flail chest should be coded on the TARN database when:
  - **3 or more ipsilateral, consecutive ribs each fractured in two locations AND / OR**
  - **Evidence of paradoxical motion of the flail chest wall segment.**



### Coding

- Any submission dispatched to TARN with 'flail chest' documented is processed as follows:
  - If 3+ consecutive ribs fractured in >1 location: coded as flail.
  - If <3 consecutive ribs fractured in >1 location: coded as non-flail.
- If number of flail ribs not specified on dispatch:
  - Submission is returned to determine the number of flail ribs and on re-dispatch:
    - Where number of flail ribs specified: coded as above.
    - Where number of flail ribs not specified: coded as non-flail.

### Documentation

- Please ensure wherever possible the number, type and location of rib fractured is fully documented.

### Result

- This consensus will enable improved coding consistency and more accurate matching of injury to severity.
- It will allow better comparison between hospitals.
- It will also align, futureproof and make more robust the research data-fields for these patients.

### When

- TARN adopted this policy to include any case dispatched from 1st October 2021 onwards.