

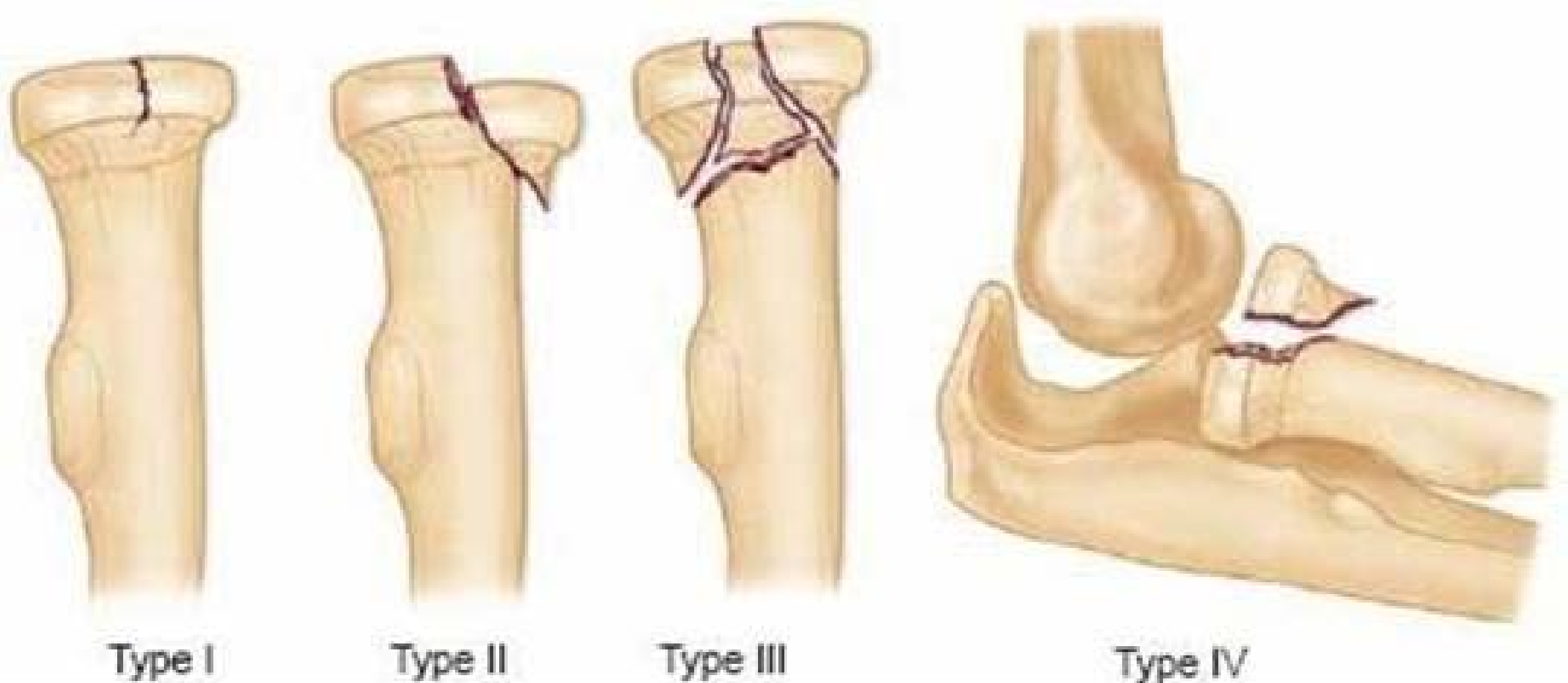
Clinical outcomes of radial head fractures managed in a virtual fracture clinic

Dr Ilya Varfolomeev

Dr Jacob Coleman-Bock

Ms Bernarda Cavka

Mr Thomas Treseder

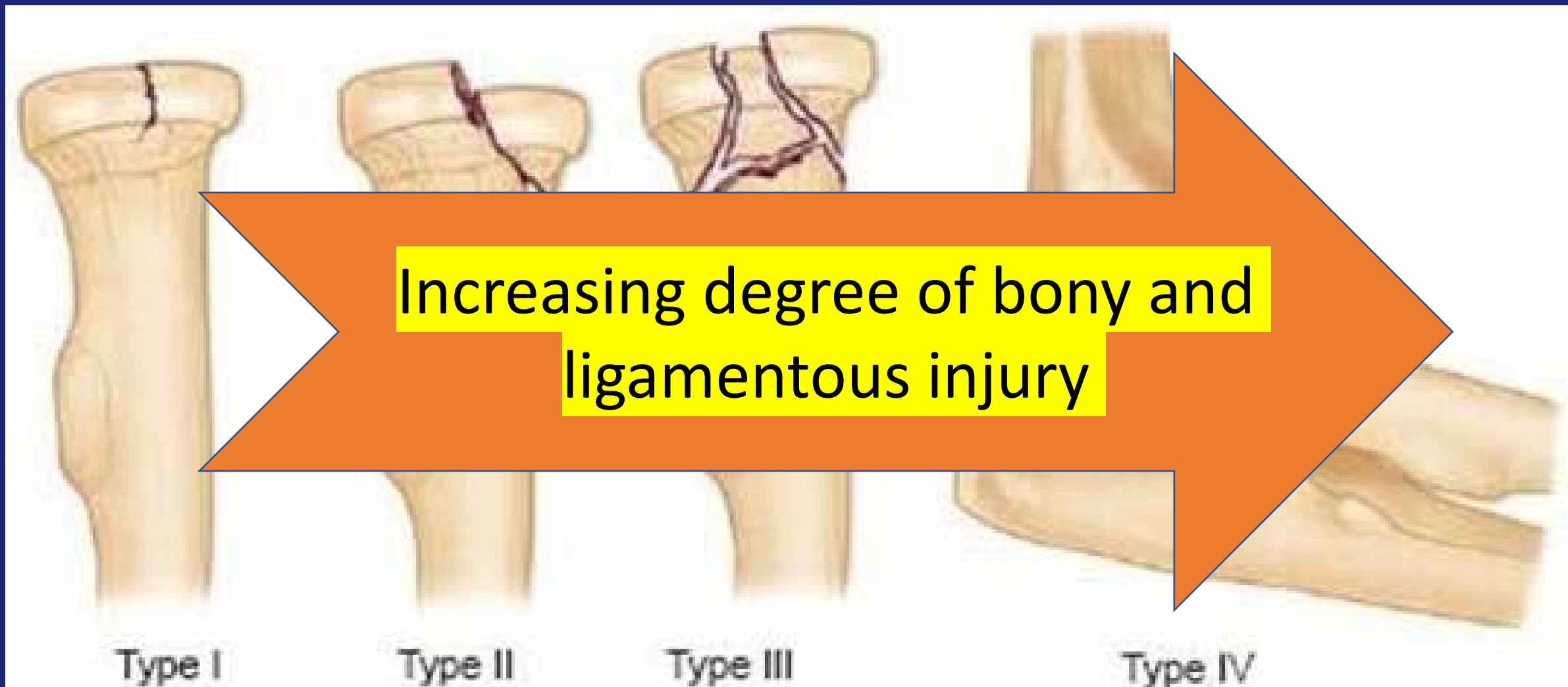


Type I

Type II

Type III

Type IV



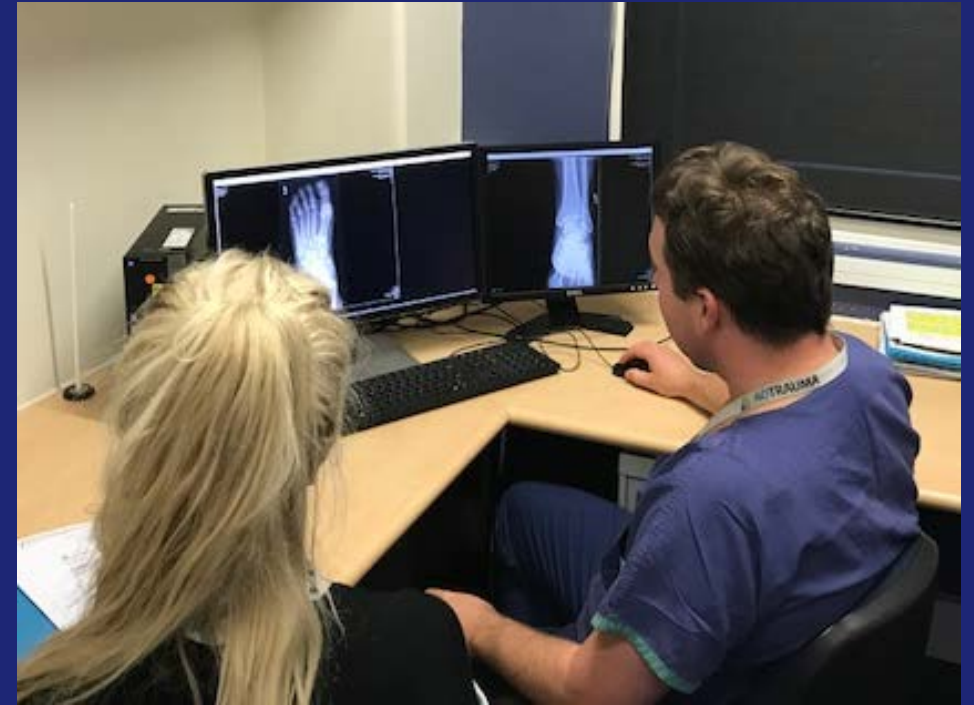
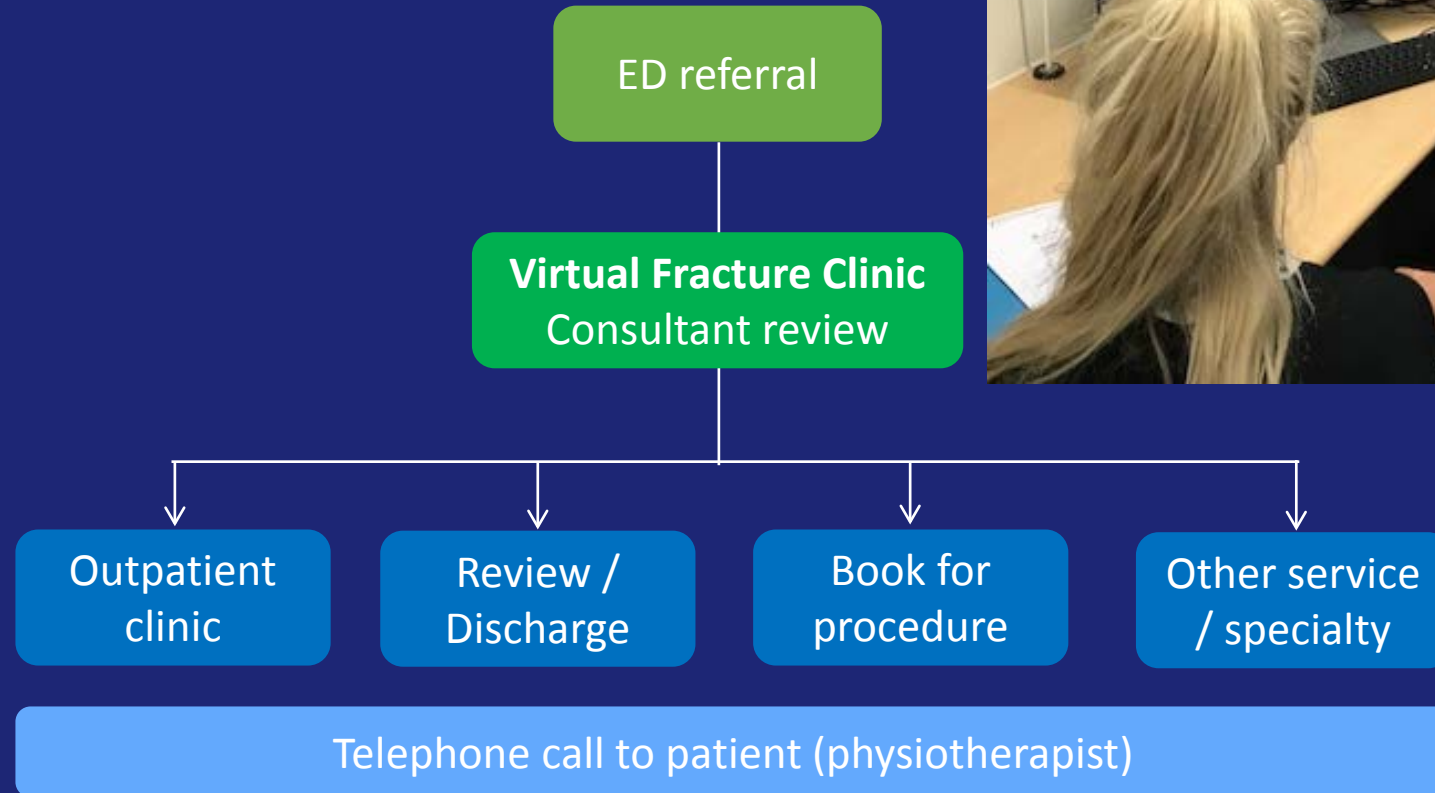
Treatment of Mason Type II Radial Head Fractures Without Associated Fractures or Elbow Dislocation: A Systematic Review

Laurens Kaas, MD, PhD, Peter A. A. Struijs, MD, PhD, David Ring, MD, PhD, C. Niek van Dijk, MD, PhD,
Denise Eygendaal, MD, PhD

Results Among 717 studies, 9 retrospective case series (level IV) describing 224 patients satisfied our inclusion criteria. Nonoperative treatment was successful in 114 of 142 patients (80%) pooled from the studies (42% to 96% success in individual studies). Open reduction and internal fixation was successful in 76 of 82 patients (93%) (81% to 100% success in individual studies).

Virtual Fracture Clinic

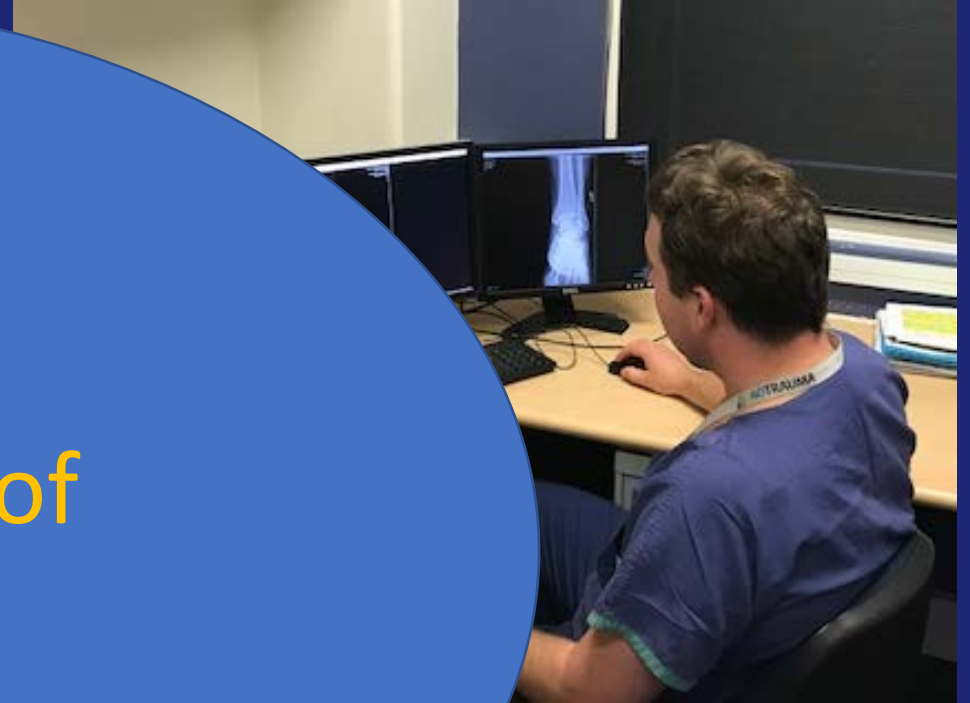
Established at RMH March 2017



Virtual Fracture

Establish

30% diversion of workflow



Service
Specialty

Teleph... (Therapist)

Aim

- Can these injuries be managed safely virtually?
- Determine factors which may be associated with poor outcomes following this injury

Study design

- Prospective cohort study 2017 – 2019

Criteria

Inclusion

- Isolated Mason I and Mason II radial head fractures March 2017 - November 2019
- > 3 months follow up

Exclusion

- Wrist pain
- CALD
- Other upper limb injuries

Management protocol

- 72/24 immobilisation
- 6/52 weightbearing restriction
- Early ROM

Measured variables

- Quick DASH /100
- PREE /50
- Return to work
- Return to leisure
- Failure: surgery or requirement for in-person review

Stats

- Student's t-test for normally distributed data
- Wilcoxon for non-parametric data
- Chi square test for return to work and return to leisure

RESULTS

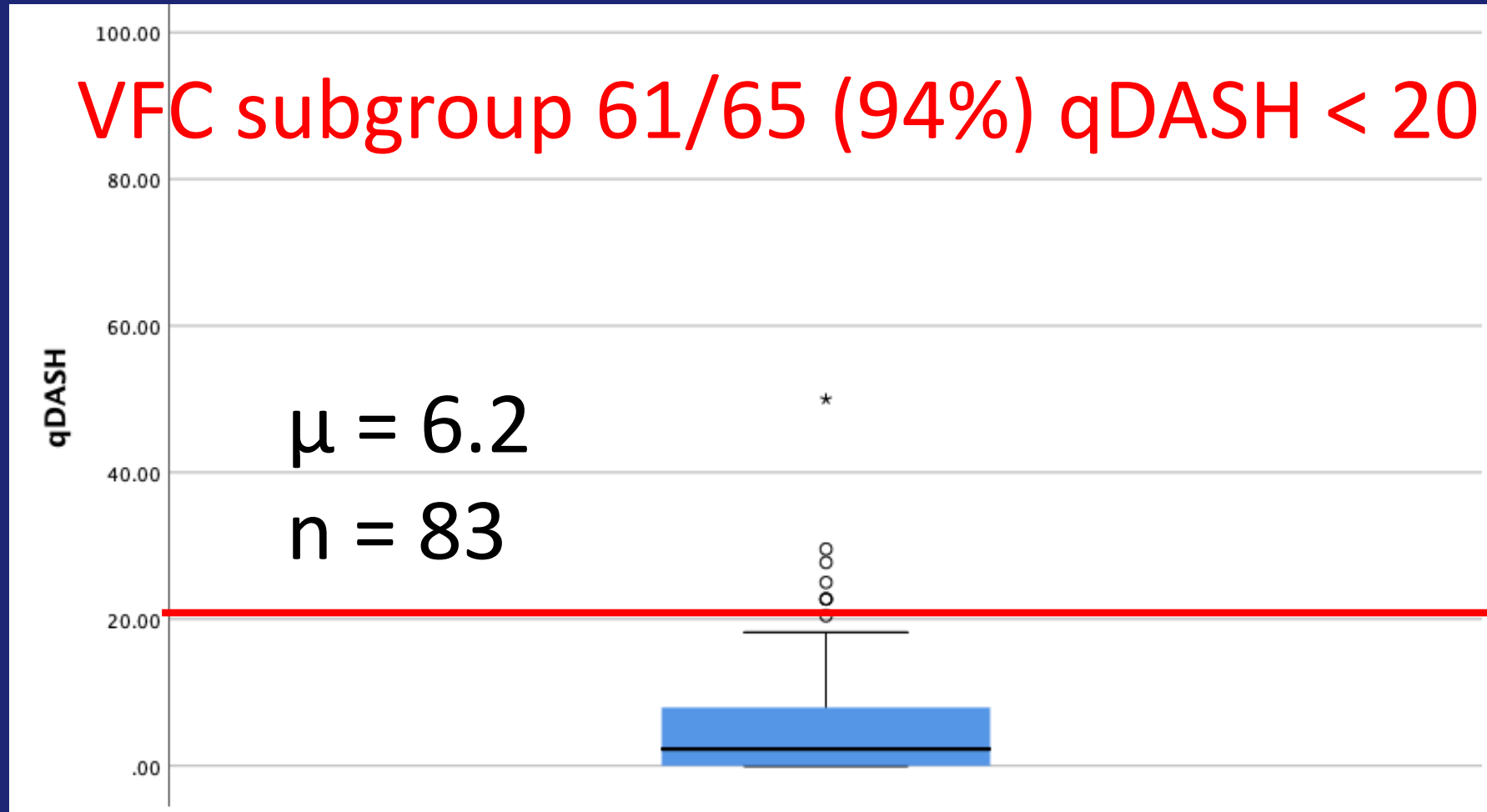
Results



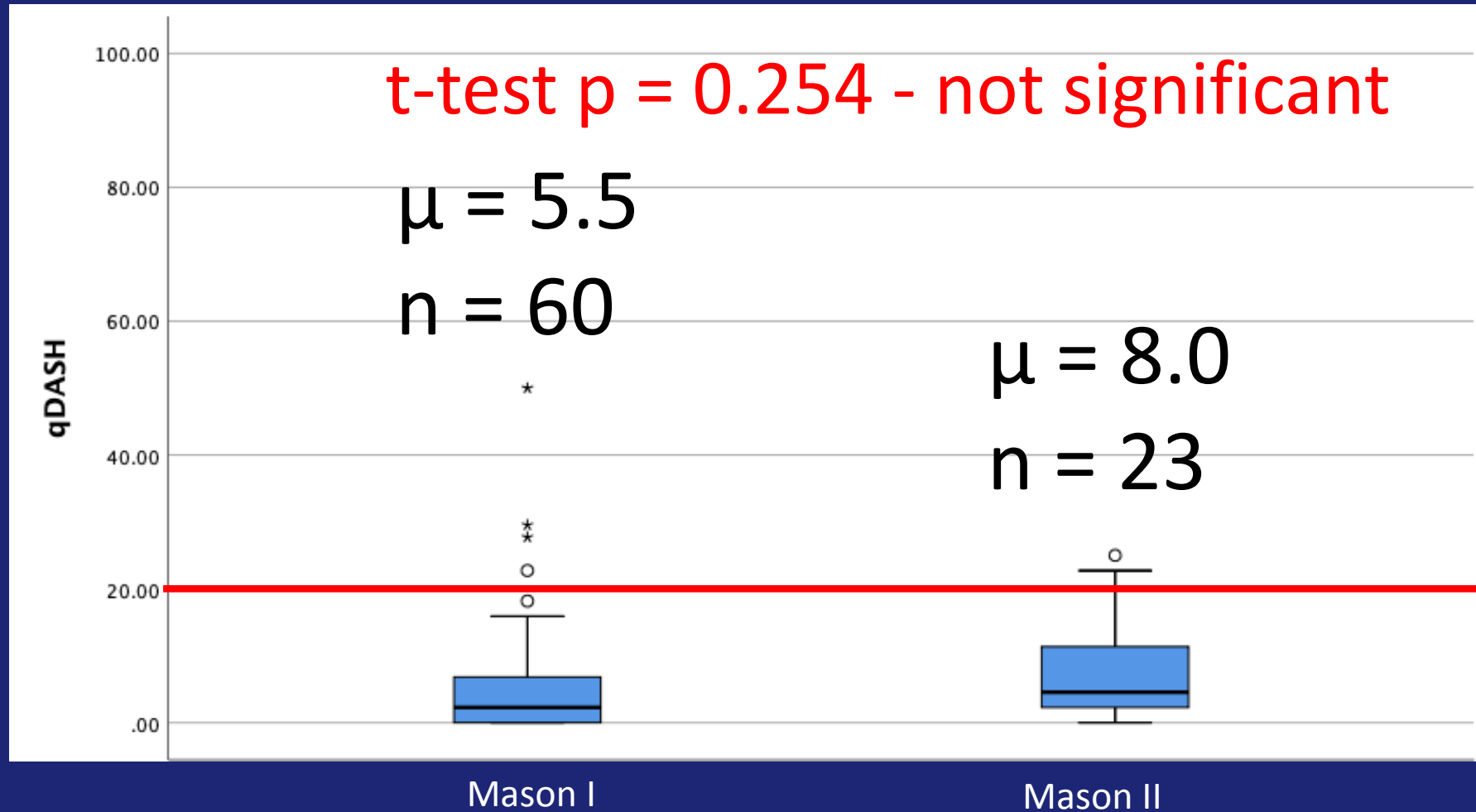
Demographics

	Combined (n=83)
Age	35 (20-79)
Gender	50 male (60%)
Smoker	15 (18%)
Manual work	19 (23%)

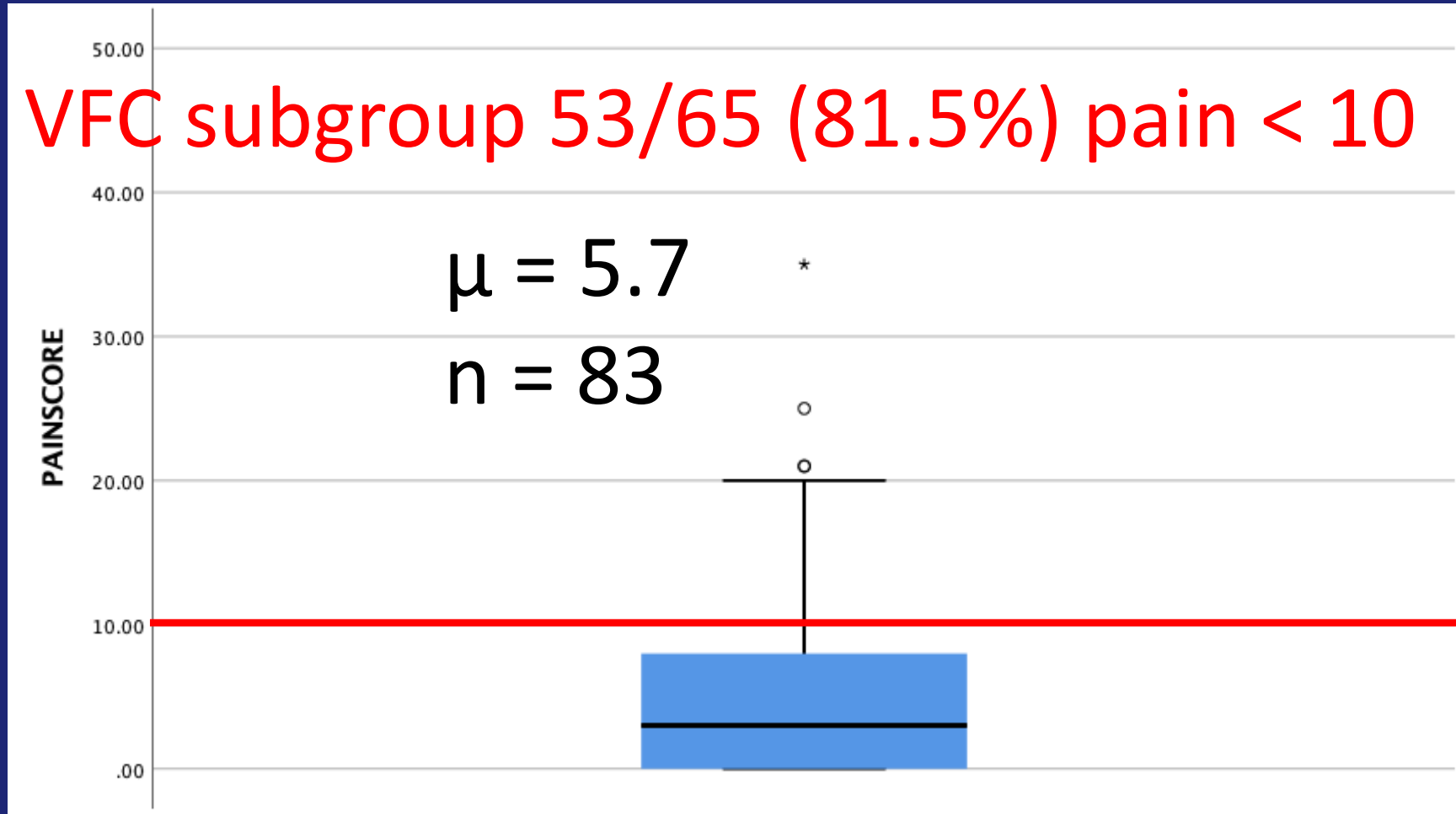
qDASH total



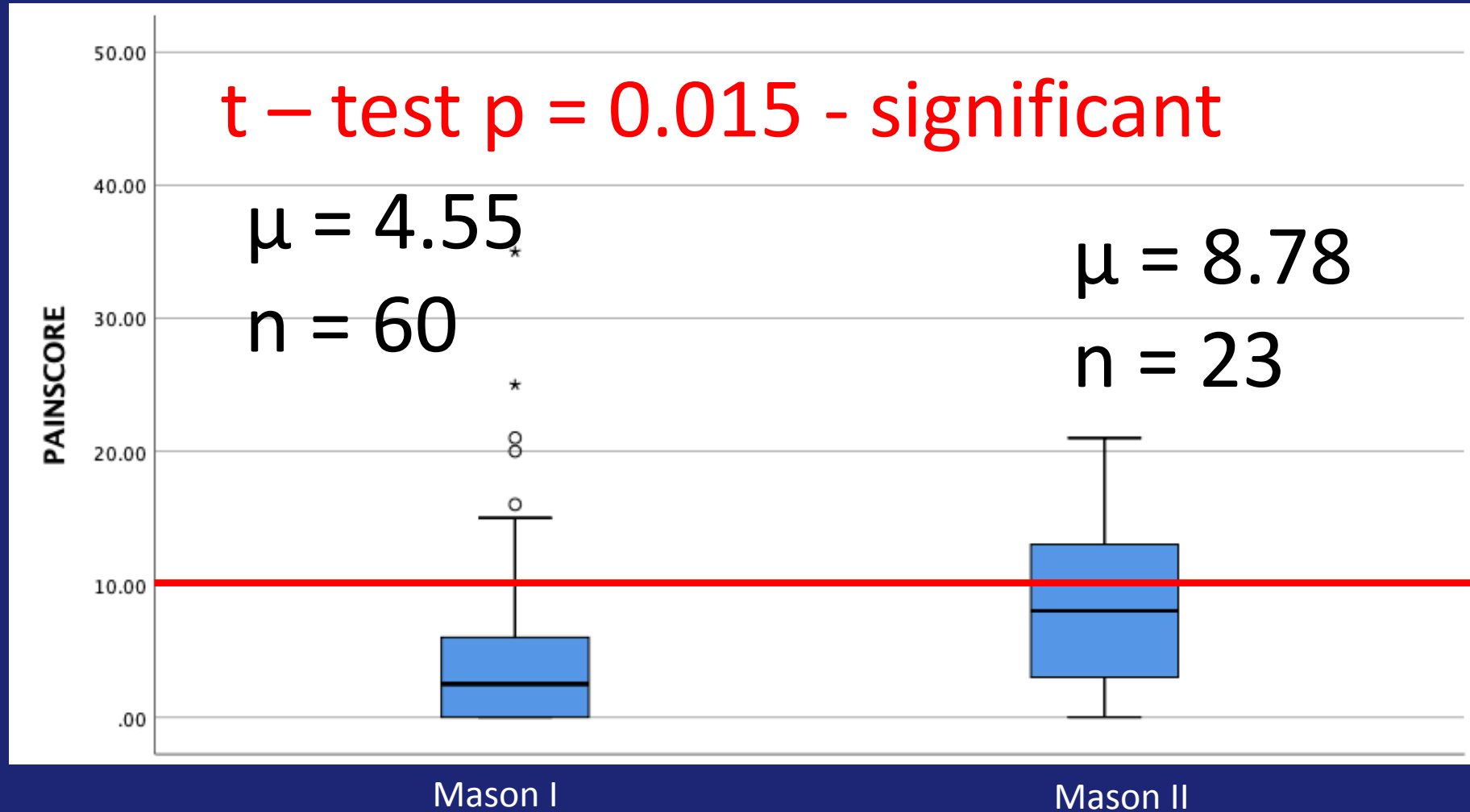
qDASH – Mason 1 and Mason 2



Pain scores



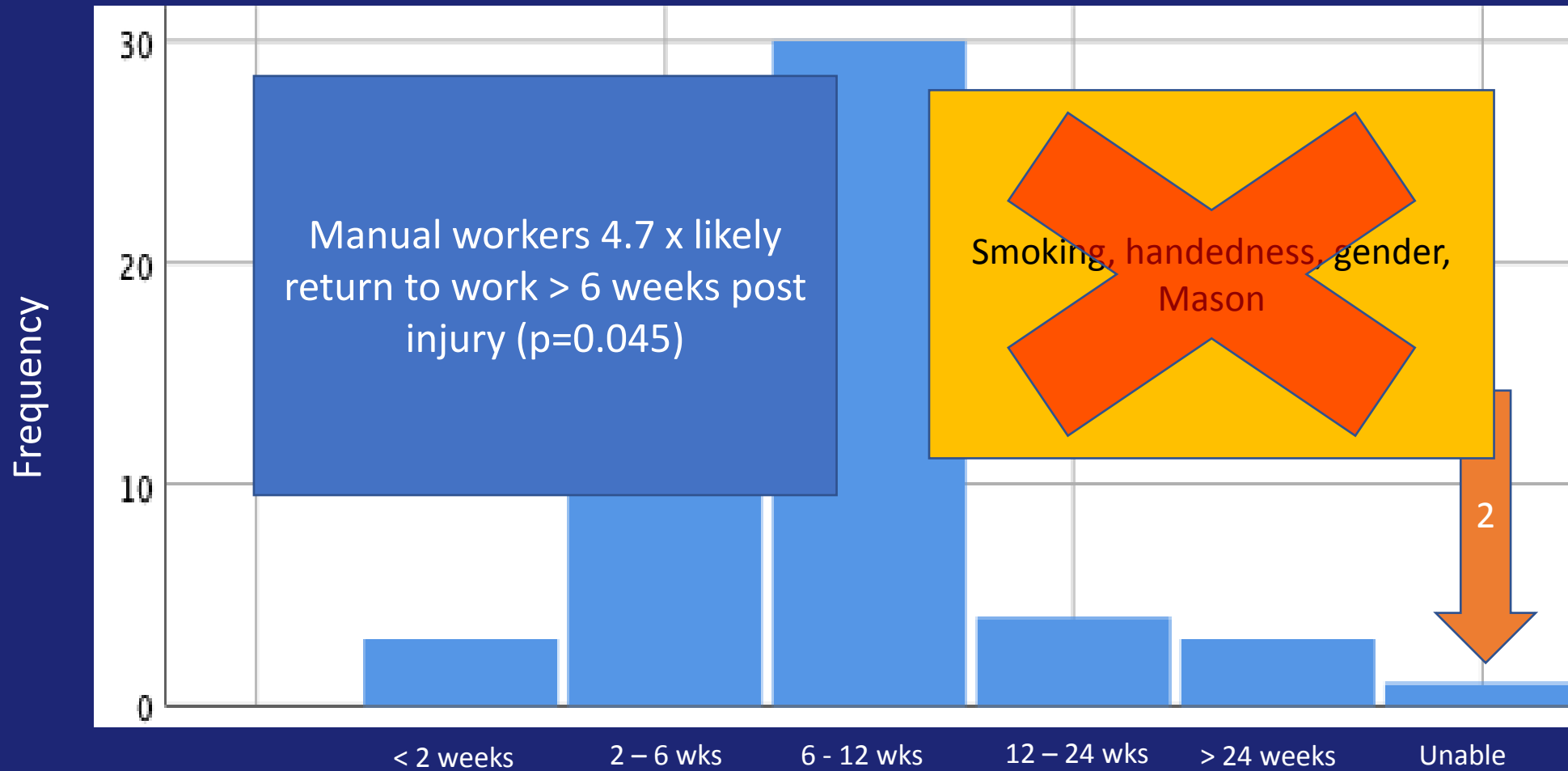
Pain scores – Mason 1 v Mason 2



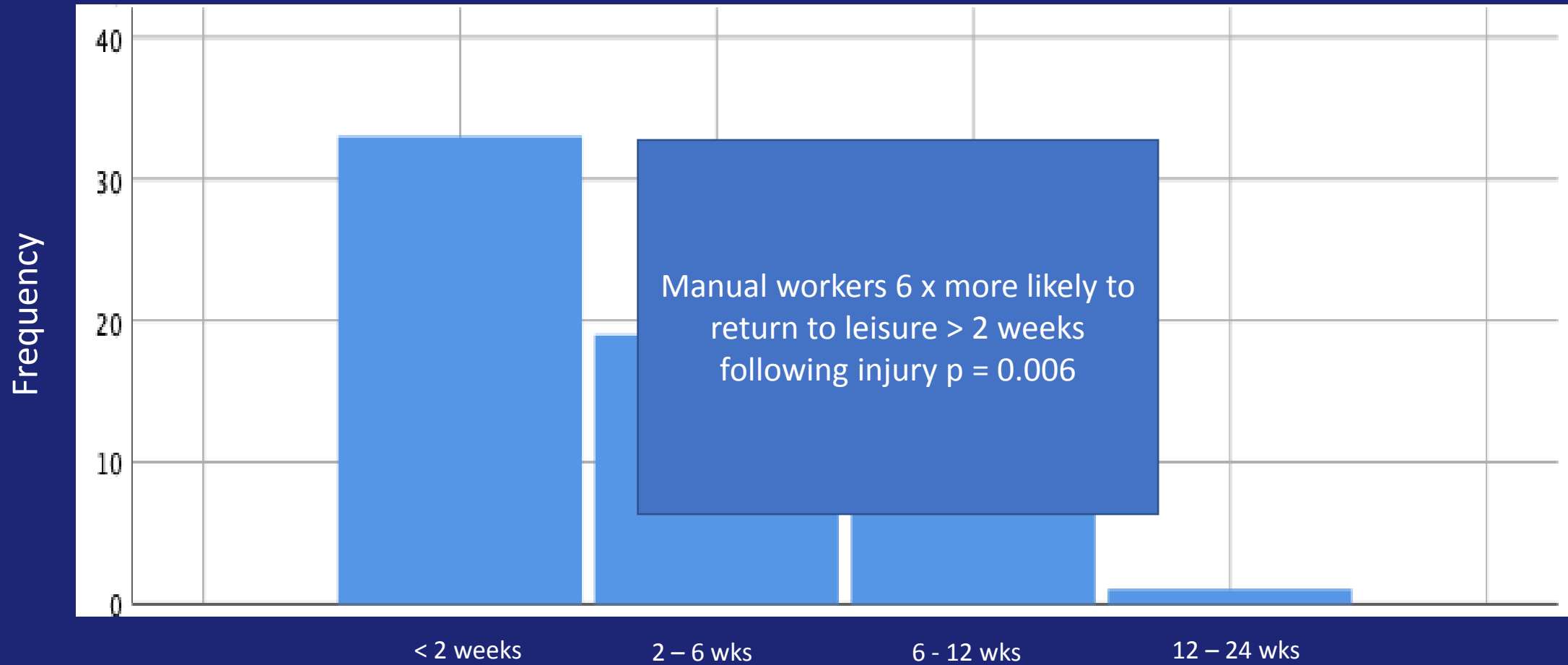
Factors affecting outcome

	QDASH p value	Pain scores p value
Gender	0.8	0.95
Age	0.12	0.15
Manual work	0.54	0.82
Handedness	0.76	0.77
Smoking status	0.62	0.005

Return to work



Return to leisure



Complications of management

- 13 VFC (7%) patients required unplanned in-person review
- No-one required surgery

Conclusion

- Outcomes? - good
- Safe and efficacious? - yes

Limitations

- Mason 1 > Mason 2
- Low response rate
- No objective functional measurements