

**Who is being asked to participate? *or* Why have I been asked to participate?**

You are being asked to participate, as you have experienced a blunt chest trauma injury with rib fractures or you care for someone who has had this injury.

**Do I have to take part?**

The questionnaires are voluntary, you will be asked to consent to take part by accepting the terms at the beginning of the questionnaire.

**Can I withdraw from the study at any time?**

You can withdraw at any point up until the questionnaire is submitted. It is regrettable but data can't be withdrawn following questionnaire

completion as all the data is anonymised and we

**Who is doing the study?** Will not be able to identify the data to withdraw.

The Chief Investigator is Dr Helen Ingoe who is an Orthopaedic Surgeon in Training based at the University of York Trials Unit. The York Trials Unit is sponsored by the British Orthopaedic Association to develop and expand the portfolio of trials in the UK related to



## **A Core Outcome Set for Surgical Rib Fracture Fixation Trials – A Delphi Study**

Have you experienced rib fractures as a patient or carer?

Have you had surgery for fractured ribs?

Do you want to influence research that could improve care of chest trauma in the future?



**Join Our Delphi Study Today**

## What is the purpose of this study?

To help patients, doctors and other health professionals make decisions about treatments, we need evidence about what works best. To do this researchers need to look at the effects those treatments have on patients. Researchers do this by measuring an 'outcome'.

When researchers design research studies to investigate treatments for health conditions they need to measure outcomes that are important and relevant to those people affected by the condition. To decide which outcomes are important researchers need to get everyone's opinion and try to reach agreement, or "**consensus**", on the most important outcomes.

## What will I need to do?

If you decide to take part, you will be asked to give an opinion on what outcomes are most important to you. The study will include doctors and other health professionals but is anonymous to make sure everyone has an equal say. The aim of the study is to develop a consensus statement on the minimum recommended outcomes we should measure if undertaking a clinical study on

surgical rib fracture fixation. Examples of outcome measures would include complications such as wound infections, clinical measures such as how well your lungs are working, life impact and use of services such length of stay in hospital or time to get back to work.

## How do you choose core outcomes?

The research team has developed a long list of possible outcomes. You will be sent the list in an online questionnaire through an email link and asked to score the importance of each outcome. If, in your opinion, there are key outcomes missing from the list, you are encouraged to add these to the list. We refer to this as "**Round 1**". The ratings are sent back to the research team, who then summarise the responses from the group as a whole.

We will send a summary back to you in what we refer to as **Round 2**. You will be given a reminder of how the rest of the group scored. Using this information you will be asked to reflect on your own view and on the view of the group and to

decide whether to stick with your original rating or change it. Through the whole process, you are not under any pressure to change your rating if you do not want to.

The responses are then sent back again to the research team who again collate the information. Every time we ask you for your opinion we call this a 'round'. There will be a maximum of three rounds lasting a **maximum of 15 minutes each**.

At the end of this process the research team produces a report on what the group has agreed as the most important outcomes. **These are called the 'core outcomes'**

## **Appendix B**

Invitation email

Dear Participant,

### **Developing a Consensus on Indications, Timing and Core Outcomes for Rib Fracture Surgical Fixation**

I am a Trauma and Orthopaedic Trainee surgeon undertaking a MD project at the University of York with funding from Orthopaedic Research UK.

I am inviting you to take part in a study in which we are bringing together clinicians who undertake rib fracture surgery and blunt chest trauma care, allied health professionals, rib fracture patients and carers. The aim of the study is to develop a consensus statement on the minimum recommended outcomes we should measure if undertaking a clinical study and the indications and timing of surgery. Clear outcomes and indications are key to developing robust research methods and increase the efficiency and value of research.

The consensus process will follow the Delphi method and completed as an anonymous online questionnaire. You will be asked to rate on a scale of 1 to 9 how much you agree with the outcomes and statements on timing and indications for surgery proposed in a list. Those outcomes that have a low relevance score will be discarded but all others will be scored again in a second round. A maximum of three rounds will take place.

All results will be anonymised using a study ID embedded within the questionnaire software. It is important that you complete all rounds as the reliability of the results could be compromised if you drop out. Even if you feel your views are in the minority compared to others within the group it is important to continue as the final results may overestimate the consensus.

The each survey will take between 15 - 25 minutes to complete and a certificate to evidence research participation will be sent on completion of all rounds.

If you are unable to participate or have physiotherapy and occupational therapy who would like to take part I would be grateful if you could forward this invite. My email address is below; please contact me directly and I will send out a personal invite.

A full summary of the study and instructions for completion is available in this document [attached](#).

You can access the first round by clicking the link [here](#).

I would like to thank you in advance of you taking part.

Miss Helen Ingoe MBBS MRSCed MSc

If you have any queries about this study please contact myself Helen Ingoe, [helen.ingoe@york.ac.uk](mailto:helen.ingoe@york.ac.uk) or If you have any concerns please contact Dr Catriona McDaid (Senior Research Fellow and Research Supervisor) Tel: +44 (0)1904 321371  
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## Appendix C

Invitation email

Dear Participant,

### **A study to find out what outcomes best show how well rib fracture surgery works**

I am a Trauma and Orthopaedic Trainee surgeon undertaking an MD project at the University of York with funding from Orthopaedic Research UK.

To help patients, doctors and other health professionals make decisions about treatments; we need evidence about what works best. To do this researchers need to look at the effects those treatments have on patients. Researchers do this by measuring an 'outcome'. For example, in a study of how well rib fracture surgery treatment works, 'outcomes' might include

- A measure of how fast you can blow air out of your lungs
- How long you stayed in hospital
- Quality of life

I am inviting you to take part in a study in which we are bringing together clinicians, allied health professionals, rib fracture patients and carers. The aim of the study is to develop a consensus on the minimum recommended outcomes we should measure to investigate how well rib fracture surgery works.

The consensus process will follow the 'Delphi method' completed as an anonymous online survey. You will be asked to 'rate' on a scale of 1 to 9 how much you agree with the outcomes that are listed. Each outcome will be scored at the end of the round and a summary will be given as feedback during the next round. You will get to reflect how other groups have scored before rescoreing them. A maximum of three rounds will take place.

All results will be confidential. Each survey (round) will take less than 15 minutes to complete.

A full summary of the study and instruction for completion is available in this document [attached](#).

You can access the first round by clicking the link [here](#).

I would like to thank you for taking part.

Miss Helen Ingoe MBBS MRSCed MSc

If you have any queries about this study please contact myself Helen Ingoe,  
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