

# Quality of life following a lower limb reconstructive procedure

<b>Submission date</b> 30/01/2020	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 28/02/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 28/03/2023	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Patient reported outcome measures (PROMs) are designed and developed to assess patients' health outcomes from their perspective (Black 2013; Bredart et al., 2014). Patients are best placed to identify which health outcomes are most relevant to them (Paterson, 2004; Trujols et al., 2013). Therefore, to ensure that patients' perspectives are fully captured in a manner that is relevant and understandable to them, it is vital that they are central to the development of PROMs (McKenna, 2011; Paterson, 2004). Despite increased awareness of the need to include patients in the development of PROMS, patients are still being underused (Wiering, de Boer, Delnoij, 2017) and there is concern over the extent to which existing PROMS used with patients who are requiring, undergoing or who have undergone reconstructive surgery for a lower limb condition, are fit for the purpose of accurately capturing important patient experiences.

**Aim:** To explore what is most important to patients requiring, undergoing or who have undergone reconstructive surgery for a lower limb condition with regards to quality of life, important outcomes and measurable impacts.

### Who can participate?

Participant are patients and staff.

The patient participants will be adults (16+) requiring, undergoing or undergone reconstructive surgery for a lower limb condition (leg, ankle or foot) which may be as a result of a congenital or acquired condition, from trauma, infection, nonunion or malunion.

Conditions may include:

- Infection - A fracture fixation which becomes infected
- Nonunion - A fracture which does not heal
- Malunion / Deformity - A fracture which does not heal in correct position.
- Any acquired or congenital condition leading to bone deformity.
- Leg length discrepancy or bone loss
- Congenital lower limb deformities
- Joint contracture
- Lower limb injuries where further limb reconstruction is required.
- Poly-trauma patients (as long as one of the above criteria are met).

The staff participants will be orthopaedic clinicians and physiotherapists who treat patients meeting the above inclusion criteria and who work at one of the five participating sites.

What does the study involve?

In order to explore important outcomes to patients after a lower limb condition, patients will be invited to take part in a semi-structured interview or a focus group and staff will be invited to take part in a semi-structured interview. Patients: Interviews and focus groups will be undertaken with patients who are requiring, undergoing or who have undergone reconstructive surgery for a lower limb condition, and will have received care through the NHS at one of the participating sites. Patient interviews will explore key health-related quality of life factors and other relevant factors to patients who have experienced a lower limb condition that requires or required reconstructive surgery. Important factors may include physical, social and psychological well-being as well as job and lifestyle related factors. Staff: Interviews will be undertaken with Orthopaedic staff (clinicians and physiotherapists) at each site. The staff will be asked to discuss, from their perspective, what they believe to be important outcomes and goals for patients.

What are the possible benefits and risks of participating?

Participants may not benefit from taking part in this research. However what they tell us may help us to understand what patients go through during a lower limb condition and reconstruction and its consequences. There are no physical risks to participating and we anticipate that the interviews/focus groups will not cause distress. However participants will be made aware that they can refuse to answer any questions which they feel uncomfortable with and can stop the interview at any time.

Where is the study run from?

University of York (UK)

When is the study starting and how long is it expected to run for?

May 2020 to August 2021

Who is funding the study?

Hull University Teaching Hospitals NHS Trust (UK)

Who is the main contact?

Dr Heather Leggett

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## Contact information

**Type(s)**

Public

**Contact name**

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**ORCID ID**

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**Contact details**

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## **Additional identifiers**

**Clinical Trials Information System (CTIS)**  
Nil known

**Integrated Research Application System (IRAS)**  
269088

**ClinicalTrials.gov (NCT)**  
Nil known

**Protocol serial number**  
IRAS 269088

## **Study information**

### **Scientific Title**

A qualitative approach to exploring what is important to patients with regards to quality of life when requiring, undergoing or after undergoing reconstructive surgery for a lower limb condition.

**Acronym**  
PROLLIT

### **Study objectives**

The principle research objective is to explore what is most important to patients who are requiring, undergoing or who have undergone reconstructive surgery for a lower limb condition, with regards to quality of life, important outcomes and measurable impacts. This information will be used to determine whether patient priorities in terms of outcomes are currently being met by existing patient reported outcome measures.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Approved 22/06/2020, South Central - Berkshire Research Ethics Committee (Health Research Authority, Skipton House, 80 London Road, London, SE1 6LH, UK; +44 (0)20 7972 2545; nrescommittee.southcentral-berkshire@nhs.net), ref: 20/SC/0114.

**Study design**

## Qualitative study design using interviews and focus groups

### Primary study design

Other

### Study type(s)

Other

### Health condition(s) or problem(s) studied

Lower limb conditions which require or required reconstructive surgery.

### Interventions

Interviews and focus groups will be undertaken with patients and staff.

Patients:

Patients will be identified and invited to participate in the research by orthopaedic clinicians, physiotherapists or research nurses at participating NHS hospitals in the first instance. Interviews will be at the hospital or over the telephone. Participants will be provided with an information sheet before consent is obtained. We will ensure that participants have read the information sheet and have a full understanding of the study before consent is obtained. Participants will not be pressured to take part and will be reminded of their right to withdraw at any time. Verbal consent will be obtained on an on-going basis during interviews. Patient interviews will explore key health-related quality of life factors and other relevant factors to patients who have experienced a lower limb condition that requires or required reconstructive surgery. Important factors may include physical, social and psychological well-being as well as job and lifestyle related factors. Topic guides will be used to guide the conversation. The interview will last between 30 minutes to 1 hour and the focus groups will last between 1-2 hours. Interviews will be audio recorded and transcribed verbatim. Participants will be informed that quotations may be used and published, but that all identifiable information will be removed. All participants will be provided with a unique ID to maintain their anonymity.

Staff:

Staff (orthopaedic clinicians or physiotherapists) will be invited to participate in the study by either direct contact from the researcher if they meet the clinician when visiting the hospital for patient interviews or through the lead contact at each site. Participants will be provided with an information sheet before consent is obtained. We will ensure that participants have read the information sheet and have a full understanding of the study before consent is obtained. Participants will not be pressurised to take part and will be reminded of their right to withdraw at any time. Verbal consent will be obtained on an on-going basis during interviews. The interview will be guided by a topic guide and staff will be asked to discuss, from their perspective, what they perceive to be important outcomes and goals for patients. The interview will last between 30 minutes to 1 hour. Interviews will be audio recorded and transcribed verbatim. Participants will be informed that quotations may be used and published, but that all identifiable information will be removed. All participants will be provided with a unique ID to maintain their anonymity.

Sampling quotas will not be applied but, in order to obtain a wide range of views, recruitment will aim to target a range of participants with regards to age, gender, different lower limb conditions, condition severity, treatment received and stage of reconstructive treatment. A sampling frame will be developed to streamline this process. The sampling frame will be developed through collaboration with lead clinicians from the participating sites. Recruitment will continue until the interviews provide no new information. We anticipate this to be around

50-75 patient participants (10-15 from each site) and around 10 (2 from each site) staff interviews.

The topic guides will be developed from a literature review of the area and reviewed by experts in the field and our patient, public involvement and engagement group. A systematic review on the same topic is currently being undertaken and if appropriate may also inform the topic guides. The topic guides will be used to guide the conversation, to ensure that it stays on track and to provide prompts to facilitate discussion.

Concept elicitation will be undertaken in the interview/focus group by asking the participants questions which explore their thoughts, attitudes and beliefs surrounding important goals and outcomes what is important to them with regards to quality of life in relation to requiring, undergoing or after reconstructive surgery for a lower limb condition.

### **Intervention Type**

Other

### **Primary outcome(s)**

Qualitative methods will be used to explore what is important to patients who are requiring, undergoing or who have undergone reconstructive surgery for a lower limb condition, with regards to quality of life, important outcomes and measurable impacts

### **Key secondary outcome(s)**

N/A

### **Completion date**

01/08/2021

## **Eligibility**

### **Key inclusion criteria**

Patient:

1. Adults (16+) requiring, undergoing or have undergone reconstructive surgery for a lower limb condition (leg, ankle or foot) which may be as a result of a congenital or acquired condition, from trauma, infection, nonunion or malunion. Conditions may include:

1.1. Infection - A fracture fixation which becomes infected

1.2. Nonunion - A fracture which does not heal

1.3. Malunion / Deformity - A fracture which does not heal in correct position. Any acquired or congenital condition leading to bone deformity.

1.4. Leg length discrepancy or bone loss

1.5. Congenital lower limb deformities

1.6. Joint contracture

1.7. Lower limb injuries where further limb reconstruction is required

1.8. Poly-trauma patients (as long as one of the above criteria are met)

Staff:

2. Staff participants will be orthopaedic clinicians and physiotherapists who treat patients meeting the above inclusion criteria and who work at one of the five participating sites

### **Participant type(s)**

Mixed

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

Patients will be excluded if they have experienced a condition in a part of the body that is not a lower limb, they have had a lower limb amputation and if they are under the age of 16.

Staff will be excluded if they do not have direct contact/involvement with the care of patients who are requiring, undergoing or who have undergone reconstructive surgery for a lower limb condition.

**Date of first enrolment**

04/11/2020

**Date of final enrolment**

01/08/2021

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre****Hull Royal Infirmary**

Hull and East Yorkshire Hospital NHS Trust.

Anlaby Road

Hull

United Kingdom

HU3 2JZ

**Study participating centre****Leeds General Infirmary**

Leeds Teaching Hospitals NHS Trust

Great George St

Leeds

United Kingdom

LS1 3EX

**Study participating centre****James Cook University Hospital**

South Tees Hospital NHS Foundation Trust  
Martin Road  
Middlesbrough  
United Kingdom  
TS4 3BW

**Study participating centre****King's College Hospital NHS Foundation Trust**

Denmark Hill  
London  
Greater London  
United Kingdom  
SE5 9RS

**Study participating centre****Royal Liverpool University Hospital**

Prescot Street  
Liverpool  
United Kingdom  
L7 8XP

**Sponsor information****Organisation**

University of York

**Funder(s)****Funder type**

Hospital/treatment centre

**Funder Name**

Hull University Teaching Hospitals NHS trust

# Results and Publications

## Individual participant data (IPD) sharing plan

All data generated or analysed during this study will be included in the subsequent results publication.

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	Participant information sheet	10/12/2020	28/03/2023	Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Participant information sheet</a>		11/11/2025	11/11/2025	No	Yes