# Evaluating whether surgical reconstruction is better than non-surgical treatment for people admitted to hospital who have a severe pressure ulcer

Submission date	Recruitment status  No longer recruiting	<ul><li>Prospectively registered</li></ul>		
13/01/2020		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
14/01/2020	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
08/10/2025	Skin and Connective Tissue Diseases			

### Plain English summary of protocol

Background and study aims

Being immobile for too long can lead to discomfort, for example pins and needles or pain. These sensations prompt us to move and this avoids poor blood flow which can lead to pressure ulcers (sometimes called bed sores). Pressure ulcers mainly affect older people confined to a bed or chair. However, younger or seriously ill patients with limited movement, for example due to a spinal injury, can be affected.

Pressure ulcers are a serious problem for patients and their carers. They range in severity from red skin (Stage 1) to deep wounds through muscle to bone (Stage 4). Pressure ulcers have a major impact on quality of life; they may heal slowly and become infected, and can increase the risk of dying in older people. They are also a costly problem for the National Health Service (NHS). People with pressure ulcers are usually treated in the community but may need hospital care. Common treatments for pressure ulcers include pressure relief, dressings and encouraging movement and change of position. Surgery can be used to try and close deep pressure ulcers but in the United Kingdom (UK) this treatment is not common. Finding out whether surgery works as a treatment is very important to people affected by pressure ulcers. At the moment, it is not clear which patients with pressure ulcers may benefit from an operation and which of the different ways of doing the surgery seems best.

### Who can participate?

Records from patients described in Hospital Episode Statistics with index admission (admitted patient care dataset) with a severe pressure ulcer between April 2012 and March 2019.

### What does the study involve?

The SIPS study will analyse data collected routinely in the NHS over the last 7 years. The study will describe the care that has been provided in England to patients with severe pressure ulcers, the kinds of patients who have been treated in different ways and examine how care is different in different places. To inform whether surgical treatments should be more widely available, the

study will identify patients who were similar when admitted to hospital with a severe pressure ulcer and compare health outcomes (such as going back to hospital and death) among those who did and did not have surgery.

What are the possible benefits and risks of participating? None

Where is the study run from? Bristol Trials Centre (BHI Hub), UK

When is the study starting and how long is it expected to run for? April 2020 to June 2023

Who is funding the study? National Institute for Health Research (HTA programme), UK

Who is the main contact? Prof. Barnaby Reeves barney.reeves@bristol.ac.uk

### Study website

https://bristoltrialscentre.blogs.bristol.ac.uk/details-of-studies/sips/

### Contact information

### Type(s)

Scientific

### Contact name

**Prof Barnaby Reeves** 

### **ORCID ID**

https://orcid.org/0000-0002-5101-9487

### Contact details

Location A703
Bristol Trials Centre (BHI Hub)
Bristol Medical School
Bristol Royal Infirmary
Bristol
United Kingdom
BS2 8HW
+44 (0)7855322705
barney.reeves@bristol.ac.uk

### Additional identifiers

## **EudraCT/CTIS** number

Nil known

### **IRAS** number

### ClinicalTrials.gov number

Nil known

### Secondary identifying numbers

v1.0

# Study information

### Scientific Title

Health outcomes in matched groups of patients admitted to hospital who have a severe pressure ulcer who do or do not have a surgical reconstruction operation.

### **Acronym**

SIPS

### **Study objectives**

Surgical reconstruction improves long term health outcomes in people who have a severe pressure ulcer during a hospital admission

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

No ethics approval required. Secondary analysis of routinely collected data (UK hospital episode statistics)

### Study design

Retrospective cohort study

### Primary study design

Observational

# Secondary study design

Cohort study

### Study setting(s)

Hospital

## Study type(s)

Treatment

### Participant information sheet

No participant information sheet available

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

Severe pressure ulcers

### **Interventions**

Current intervention as of 16/12/2020:

Reconstructive surgery operations coded with OPCS-4 codes: S17, S18, S19, S20, S21, S22, S23, S24, S25, S26 and S27. Surgical debridement (OPCS code S57.1) will also be described.

Participants will have been treated in hospital for a severe pressure ulcer (potentially among other diagnoses). Our intention is to capture all diagnoses at 'enrolment' (to characterise participants at the time of the index hospital admission) and then describe all procedures administered in that admission and subsequently, and describe outcomes such as duration of index admission, and time to readmission with a pressure ulcer related diagnosis.

Previous intervention:

Reconstructive surgery operations coded with OPCS-4 codes: S17, S18, S19, S20, S21, S22, S23, S24, 25, S26. Surgical debridement (OPCS code S57.1) will also be described.

Participants will have been treated in hospital for a severe pressure ulcer (potentially among other diagnoses). Our intention is to capture all diagnoses at 'enrolment' (to characterise participants at the time of the index hospital admission) and then describe all procedures administered in that admission and subsequently, and describe outcomes such as duration of index admission, and time to readmission with a pressure ulcer related diagnosis.

### Intervention Type

Procedure/Surgery

### Primary outcome measure

Time to first subsequent admission with a pressure-ulcer related diagnosis measured using patient records

### Secondary outcome measures

Measured using patient records:

- 1. Type of surgical reconstruction (OPCS code), if any
- 2. Duration of index admission
- 3. Time to first subsequent admission with a pressure-ulcer related diagnosis
- 4. Rate of subsequent admissions with a pressure-ulcer related diagnosis
- 5. Surgical reconstruction after discharge for the index admission
- 6. Mortality

### Overall study start date

01/09/2018

### Completion date

30/06/2023

# **Eligibility**

### Key inclusion criteria

Current participant inclusion criteria as of 16/12/2020:

Patients described in Hospital Episode Statistics with index admission (admitted patient care dataset) with a severe pressure ulcer (ICD-10 codes L89.2, L89.3, L89.9) or any pressure ulcer (L89.X) during a period of 8 years (01/04/2011-31/03/2019), linked with other HES APC and

outpatient episodes and mortality data (to 31/03/2019). The target population for the HES cohort is: patients aged >=18 years in England admitted to hospital, with an ICD-10 diagnosis code for a severe pressure ulcer.

Previous participant inclusion criteria:

Patients described in Hospital Episode Statistics with index admission (admitted patient care dataset) with a severe pressure ulcer (ICD-10 codes L89.2, L89.3, L89.9) during a period of 7 years (01/04/2012-31/03/2019).

### Participant type(s)

**Patient** 

### Age group

Adult

### Lower age limit

18 Years

### Sex

Both

### Target number of participants

All patients with a record as described will be eligible (estimated 35,000 per year)

### Total final enrolment

291326

### Key exclusion criteria

There are no secondary outcome measures

### Date of first enrolment

01/04/2011

### Date of final enrolment

31/03/2019

## Locations

### Countries of recruitment

England

United Kingdom

### Study participating centre Bristol Trials Centre (BHI Hub)

Bristol Medical School Bristol Royal Infirmary Bristol

# Sponsor information

### Organisation

University Hospitals Bristol NHS Foundation Trust

### Sponsor details

Education & Research Centre, Level 3
Upper Maudlin Street
Bristol, BS2 8AE
Bristol
England
United Kingdom
BS2 8AE
+44 (0)117 342 0233
research@uhbristol.nhs.uk

### Sponsor type

Hospital/treatment centre

### Website

http://www.uhbristol.nhs.uk/

### **ROR**

https://ror.org/04nm1cv11

# Funder(s)

### Funder type

Government

### Funder Name

National Institute for Health Research

### Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

### **Funding Body Type**

Government organisation

### **Funding Body Subtype**

National government

Location

United Kingdom

### **Results and Publications**

### Publication and dissemination plan

Some co-applicants are contributing to NHS England's National Wound Care Strategy, which will provide a key avenue to communicate findings. We will report findings at conferences and in high-impact general journals. We will impact on clinical practice by engaging with professional bodies; study collaborators have strong links with organisations including the Tissue Viability Society and NICE.

We will ensure members of our Patient and Public Involvement (PPI) forum are actively involved in carrying out activities relating to dissemination and public engagement. Opportunities such as talks to local groups and other events will be considered on a case by case basis. A lay summary of the research and its findings will be written and added to collaborator University websites and relevant blogs. To maximise visibility and accessibility of the material, we will use Google metrics to ensure our wording on the relevant site means the web page is located high in the returned list from a Google search. We also have close links with local Trusts and will aim to distribute the summary locally at relevant patient events in addition to online content.

### Intention to publish date

30/09/2024

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to restrictions imposed by the data source.

To support further engagement work we will liaise with experienced colleagues at the NIHR Manchester Biomedical Research Centre and Public Programmes at Manchester University NHS Foundation Trust to undertake a range of engagement activities at public events including the Manchester Science Festival. These activities will raise the profile of pressure ulcers and research to improve their management.

We will link with existing networks at the University of Manchester to ensure our findings are presented locally to both academics, clinicians and members of the public, for example the Manchester Institute for Collaborative Research on Ageing, seminars for which are regularly well-attended by each of these groups.

We will publish relevant journal articles and attend at least one key conference. We will also draft media-friendly articles for relevant trade journals such as the Nursing Times and Nursing Standard. We will summarise the work using widely accessed, research-focused resources such as The Conversation and Kudos. We will also contact the NIHR Dissemination Centre to ask for advice where there are specific findings we want to publicise. Publications will be supported by targeted social media activity, especially through Twitter, using current accounts that link to a wide range of relevant stakeholder groups to ensure wide dissemination alongside a study specific account. Where required, press releases and media support will be provided.

**IPD sharing plan summary**Not expected to be made available

# Study outputs

Output type	<b>Details</b> version 2.0	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file		04/11/2020	17/08/2022	No	No
Results article		30/09/2025	08/10/2025	Yes	No