

# Text messages for pressure ulcer prevention in spinal cord injury

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05/06/2017	Suspended	<input type="checkbox"/> Protocol
<b>Registration date</b>	<b>Overall study status</b>	<input type="checkbox"/> Statistical analysis plan
09/06/2017	Completed	<input type="checkbox"/> Results
<b>Last Edited</b>	<b>Condition category</b>	<input type="checkbox"/> Individual participant data
21/12/2020	Injury, Occupational Diseases, Poisoning	<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Pressure ulcers (also known as pressure sore) are described as an area of damage to the skin caused by prolonged loading (pressure) in bony area. Up to 85% of spinal cord injury (SCI) patients' form a pressure sore at some point during their lifetime, usually a result of sitting in a wheelchair. When a pressure sore forms after a SCI, patients usually have to stay in hospital longer and delay their rehabilitation programme and loss of independence, which add extra burdens to the psychological (mental) trauma of the injury and reduced quality of life. Sometimes surgery is necessary for severe ulcers, as patients can die from complications of infected pressure sores. Pressure sores are also expensive to treat. Therefore, preventing pressure sores is very important in the SCI population. Currently, people with SCI are provided with prevention education programmes at the hospital, are prescribed expensive cushions, and are told to perform pressure relief exercises every day. Still, the rate of pressure sores remains high. Recent research has found that patients with SCI did not learn much about skin care to prevent pressure sores while in hospital, and many patients lost motivation or were unsure how to perform the pressure relief exercises they were told to do. Interestingly, using text messaging as a reminder has been reported to improve adherence to medication and exercise regimen. The aim of this study is to look at whether the text message as a reminder would improve patients' concordance (consistency) with the 'pressure relief' exercise as well as reduce the pressure sore incidence in people with SCI.

### Who can participate?

Adults aged 18 to 70 years old who are scheduled to be discharged from hospital with SCI.

### What does the study involve?

Participants are allocated to one of two groups. Those in the first group receive education and reminder text messages twice a week for six months after their discharge from hospital. Those in the second group do not receive text messages. Participants receive standard follow-up rehabilitation care. Participants complete questionnaires before they are discharged from hospital, and again three and six months after they are discharged to assess participants' concordance with pressure-relief regimen, quality of life and the number of skin related problems.

What are the possible benefits and risks of participating?  
There are no notable benefits or risks with participating.

Where is the study run from?  
London Spinal Cord Injury Centre, Royal National Orthopaedic Hospital (UK)

When is the study starting and how long is it expected to run for?  
January 2017 to December 2021

Who is funding the study?  
Rosetrees Trust (UK)

Who is the main contact?  
Dr Liang Qin Liu

## Contact information

**Type(s)**  
Public

**Contact name**  
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## Additional identifiers

**Integrated Research Application System (IRAS)**  
219199

**Protocol serial number**  
34112, IRAS 219199

## Study information

**Scientific Title**

# Educational text messaging for pressure ulcer prevention in people with spinal cord injury who are newly discharged from hospital: a pilot study

## Study objectives

The aim of this study is to assess whether using text messages as a reminder would improve patients' concordance with the 'pressure relief' regimen, and quality of life as well as reduce the pressure Ulcer (PrU) incidence in people with spinal cord injury (SCI).

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Central Bristol Research Ethics Committee, 26/04/2017, ref: 17/SW/0097

## Study design

Randomised; Interventional; Design type: Prevention, Education or Self-Management, Management of Care, Rehabilitation

## Primary study design

Interventional

## Study type(s)

Treatment

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

Spinal cord injury

## Interventions

Participants are randomly allocated to either the 'text message group' or the 'no text message group' using block randomisation. A random number generator is used to produce numbers and the randomisation list is concealed using individual opaque envelopes before patients are screened and consent to take part in the study.

Text message group: Participants receive a welcome text message on the day after they consent to join the study. They also receive some educational text messages twice per week during the first four weeks after they are discharged from hospital, then text message reminders twice per week for the duration of the six month trial.

No text message group: Participants do not receive any text messages after their discharge from hospital.

Participants in both arms continue to receive standard pressure ulcer prevention education and follow-up as per the standard hospital protocol.

Participants are asked to complete two short questionnaires before they are discharged from the hospital, and at three and six months after they are discharged from the hospital. The first questionnaire called the Pressure relief concordance questionnaire assesses concordance to pressure relief and skin inspection. The second questionnaire is the brief illness perception questionnaire that assesses participants views on pressure sores. Each questionnaire takes

around five to ten minutes to complete. There are no study visits, as participants fill out hard copies of the questionnaires and return them in a stamped addressed envelope to the researcher.

### **Intervention Type**

Other

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

Concordance with 'pressure-relief' regimen is measured using the 'Pressure relief' concordance questionnaire at baseline, three and six months after discharge.

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

1. The number of any grade of skin problem or numbers of seeing GP/nurse/hospital for skin concerns are reported by the participants using the Brief Illness Perception questionnaire at baseline (immediately after the consent and or/ shortly before discharged from the hospital), three and six months after discharge
2. Acceptability and satisfactory of receiving educational text message is assessed using a questionnaire at six months after discharge

### **Completion date**

31/12/2021

## **Eligibility**

### **Key inclusion criteria**

1. Willing and able to give informed consent for participation in the study
2. Aged 18 to 70 years old
3. Supra-sacral spinal cord injury at any spine level with complete or incomplete lesion, and are scheduled to be discharged from hospital after their first admission to London Spinal Injury Centre, Royal National Orthopaedic Hospital;
4. Can read English and complete questionnaires (due to lack of interpreter resource for this project, patients who can't read English to complete the questionnaires will be not eligible)
5. Individuals who didn't complete the standard pressure sore prevention education program at the LSCIC

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

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Lower age limit**

18 years

### **Sex**

All

## **Key exclusion criteria**

1. Patients who are younger than 18 years old
2. Patients who are older than 70 years old
3. Patients who have difficulties in adequately understanding written or verbal information in English
4. Patients who did not complete the standard pressure sore prevention education program at the LSCIC

## **Date of first enrolment**

06/06/2017

## **Date of final enrolment**

30/09/2021

## **Locations**

### **Countries of recruitment**

United Kingdom

England

### **Study participating centre**

#### **London Spinal Cord Injury Centre**

Royal National Orthopaedic Hospital NHS Trust  
Brockley  
United Kingdom  
HA7 4LP

## **Sponsor information**

### **Organisation**

Middlesex University

### **ROR**

<https://ror.org/01rv4p989>

## **Funder(s)**

### **Funder type**

Charity

### **Funder Name**

Rosetrees Trust

**Alternative Name(s)**

Teresa Rosenbaum Golden Charitable Trust, Rosetrees

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Trusts, charities, foundations (both public and private)

**Location**

United Kingdom

## Results and Publications

**Individual participant data (IPD) sharing plan**

The current data sharing plans for the current study are unknown and will be made available at a later date.

**IPD sharing plan summary**

Data sharing statement to be made available at a later date

**Study outputs**

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