

# Pre-operative behavioural intervention for risky drinkers before elective orthopaedic surgery

<b>Submission date</b> 06/01/2016	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 06/01/2016	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 20/05/2020	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

The National Institute for Health and Care Clinical Excellence (NICE) recognises that major surgery often represents the only treatment for worsening arthritis. The majority of patients undergoing knee and hip replacement surgery are over 65 years of age. Unfortunately, older patients are more at risk of developing complications following surgery when compared to younger patients. The reasons for this are unclear but age should not in itself be a barrier to performing surgery. Detecting and reducing factors known to put a patient more at risk of developing complications after surgery, especially in older patients, is becoming increasingly important. For this reason, preoperative (before surgery) assessment clinics are becoming common in the UK. These clinics provide an underutilised, early opportunity to develop interventions (i.e. treatments) that reduce the risks associated with surgery and ultimately improve outcome. Drinking excessive amounts of alcohol is associated with an increased risk of complications after surgery, preventing early recovery and prolonging rehabilitation. Therefore any therapy that successfully the amount of alcohol a person drinks before surgery is likely to be very beneficial. Being able to detect a patient that drinks a lot of alcohol, followed by techniques that aim to support them to reduce their intake of alcohol through changing their attitudes and behaviours, have been successful in reducing the amount that is consumed in other clinical situations; this includes accident and emergency, general practice and some hospital wards. These techniques therefore have considerable potential in reducing alcohol consumption before surgery. This study aims to tailor a detection and brief behaviour-change intervention to patients being referred for major joint surgery. Use of the preoperative assessment clinic will provide a dedicated workforce applying the process at a much earlier stage than would be otherwise, thereby hoping to maximise the potential benefit of the intervention.

### Who can participate?

Adults aged at least 18, about to have a hip or knee replacement and identified as heavy drinkers.

### What does the study involve?

The study is split into two phases. The first phase takes place in a preoperative assessment clinic in the North East of England. The first objective is to establish a nurse-administered preoperative screening tool, to identify those patients that drink a lot of alcohol. Any patients

detected as heavy drinkers are then invited to discuss this, over one or two sessions, with dedicated preoperative assessment nurses, with the aim of motivating and supporting the patient to think about and plan a change in drinking habits before surgery. The ease with which this process is integrated into the surgical pathway (the steps that are taken when someone is having surgery) and how acceptable it is to both patients and nurses is then assessed. In phase 2, the now optimised screening and behavioural intervention is tested in a study that takes place in up to three hospitals in the Tyne and Wear area. Patients are randomly allocated into one of two groups. Those in group 1 are given the usual care before surgery. Those in group 2 receive the intervention before surgery. It is hoped that this phase of the study will provide information that will help in developing a much larger study to promote cutting down on the amount of alcohol a person drinks before surgery in the orthopaedic population (patients about to have joint replacement surgery, for example).

What are the possible benefits and risks of participating?

Not provided at time of registration

Where is the study run from?

The Newcastle upon Tyne Hospitals NHS Foundation Trust (UK)

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

February 2016 to July 2018

Who is funding the study?

National Institute for Health Research (UK)

Who is the main contact?

Miss Nicola Goudie

## Contact information

**Type(s)**

Public

**Contact name**

Miss Nicola Goudie

**Contact details**

Newcastle Clinical Trials Unit  
Newcastle University  
1-4 Claremont Terrace  
Newcastle upon Tyne  
United Kingdom  
NE2 4AE

## Additional identifiers

**Protocol serial number**

HTA 14/42/01

## Study information

**Scientific Title**

PRE-Operative Behavioural Intervention for Risky Drinkers before elective orthopaedic Surgery

**Acronym**

PRE-OP BIRDS

**Study objectives**

This study aims to develop a screening and behavioural intervention tool related to the specific issue raised by preoperative alcohol consumption. If successful, this approach aimed specifically at the surgical population, will have significant benefit in the early postoperative phase by:

1. Reducing deleterious effects on wound healing, infection and bleeding episodes
  2. Preventing an escalation of complications, which will prevent early mobilisation, further impair physical functional return and prolong hospital stay. This is particularly relevant to the elective orthopaedic population where patient recovery times rely heavily on the promotion of early mobilisation
  3. Ensuring a more timely return to functional independence with less reliance on family and community social support
- and late postoperative phase by preventing postoperative complications that reduce longevity.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

North East - Newcastle & North Tyneside 2 Research Ethics Committee, 16/12/2015, ref: 15/NE /0419

**Study design**

1. Feasibility single centre study
2. Pilot multi-centre randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Prevention

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

Risky drinking

**Interventions**

Behavioural Intervention. The intervention will be delivered over two sessions – the first session will last approximately 30 minutes, while the second session will be an optional, booster session and will last approximately 20 minutes. The first intervention session will provide patients identified as increased or high risk drinkers with five minutes of simple, structured advice regarding alcohol consumption including specific feedback on risk, normative comparison, the benefits of reducing alcohol intake strategies that could be used to reduce drinking and a personal target for reduced drinking. This will be followed by 15-25 minutes of behaviour change intervention targeting alcohol reduction and cessation. Two intervention tools will be utilised: a Brief Advice (BA) tool will act as a visual aid for communicating information and will provide participating healthcare professionals with prompts on how to structure and deliver this

advice to participating patients. A brief behaviour change intervention tool will be used by healthcare professionals to guide discussion, goal setting and problem solving with participating patients and to record aspects of the intervention (e.g., goals and plans) to prompt behaviour outside of the clinical setting. Participants will be given both intervention tools to take away with them. They will also be given a copy of the Department of Health's information leaflet 'How much is too much?'

The optional booster session will aim to review or revise behavioural goals, provide feedback on performance and increase self-efficacy. This sessions will also allow those individuals who have showed an initial intention to make changes, but who have not formally set a goal and action plan to move forward.

This intervention will be compared against standard care in the second phase of the study (the pilot RCT) - A purposive sample of healthcare professionals including lead clinicians and nurses from across all three centres that will participate in the pilot RCT, will be selected to take part in focus group discussions. The aim is to explore perceptions about the current status of preoperative alcohol screening and behavioural intervention in the older orthopaedic population and to understand what defines usual practice in preoperative assessment, particularly in respect of screening for risky drinking in the three centres. The focus group discussions will assist the team to define the comparator group for the pilot RCT trial.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

Feasibility Study (Phase 1):

1. Acceptability and feasibility assessment of themes identified in Framework analysis of staff and patient interview transcripts.

External Pilot RCT (Phase 2):

Primary outcome measures to judge the success of the external pilot:

Recruitment and randomisation rates defined by;

1. Proportion of eligible patients who agree to participate in the trial and
2. Proportion of enrolled patients successfully followed up 6 months after baseline assessment

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

Feasibility Study (Phase 1):

1. Fidelity of delivery assessment via audio recordings of interventions delivered
2. Characterisation assessment of themes identified in Framework analysis of focus group transcripts

External Pilot RCT (Phase 2):

1. Rates of eligibility and reasons for ineligibility (captured through screening logs)
2. Acceptability of the study design including attendance rates at the second session, completion of outcome measures, retention and reasons for drop-outs; as well as via qualitative work
3. Alcohol consumption as measured by AUDIT score at preoperative assessment (baseline), before surgery (night before or day of surgery), at 6 weeks post-surgery and at 6 months after preoperative assessment

## **Completion date**

## Eligibility

### Key inclusion criteria

Screening and Intervention Health Care Professionals:

1. Currently employed in the primary centre as a preoperative assessment nurse
2. Willing and able to attend study specific training

Health Care Professionals Focus Groups:

1. Currently involved in the orthopaedic patient pathway in one of the three centres identified for the RCT

Patient Participants:

1. Adults aged  $\geq 18$  years listed for elective primary hip or knee arthroplasty
2. Patients scoring  $\geq 8$  on AUDIT and at least weekly drinking of 6 units or more in one session
3. Capacity to provide informed written consent
4. Ability to write and converse in English (able to understand English sufficiently to complete the study questionnaires without the need for an interpreter)

### Participant type(s)

Mixed

### Healthy volunteers allowed

No

### Age group

Adult

### Lower age limit

18 years

### Sex

All

### Total final enrolment

122

### Key exclusion criteria

Health Care Professionals:

1. Those not willing to consent to audio recordings of intervention sessions which are required for fidelity assessment

Patient Participants:

1. Patients scoring  $<8$  on AUDIT
2. Patients who do not consume 6 units of alcohol or more in one session at least weekly
3. Patients likely to undergo sequential (on different dates) joint replacements (for bilateral disease) within the scope of the proposal (due to reduced availability for 6 month follow up)
4. Patients displaying current (active) withdrawal from alcohol; these individuals will be referred for review by an addiction psychiatrist
5. Severe psychiatric disorder requiring medical therapy and severe cognitive impairment

/dementia impacting on ability to interact with intervention and increasing likelihood of postoperative delirium

**Date of first enrolment**

01/03/2016

**Date of final enrolment**

28/06/2018

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**The Newcastle upon Tyne Hospitals NHS Foundation Trust**

Freeman Hospital

Freeman Road

High Heaton

Newcastle upon Tyne

United Kingdom

NE7 7DN

## **Sponsor information**

**Organisation**

The Newcastle upon Tyne Hospital NHS Foundation Trust

**ROR**

<https://ror.org/05p40t847>

## **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

### Individual participant data (IPD) sharing plan

The 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="#">Results article</a>	results	01/03/2020	10/03/2020	Yes	No
<a href="#">Protocol article</a>	protocol	01/12/2018		Yes	No
<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