

# COBRA : Cost and Outcome of Behavioural Activation

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<b>Registration date</b> 09/12/2011	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 14/01/2022	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Clinical depression is one of the most common and debilitating of the psychiatric disorders. It accounts for the greatest burden of disease among all mental health problems, and is expected to become the second-highest amongst all general health problems by 2020. This is a study of two psychological interventions - Behavioural Activation (BA) and Cognitive Behaviour Therapy (CBT) - to establish whether there are important clinical and cost differences between them.

### Who can participate?

Participants will be adults aged 18 and older with Major Depressive Disorder assessed through a standard clinical interview by members of the research team. We will not be able to include people who are alcohol or drug dependent, acutely suicidal, have physical health reasons for any impairments in their thinking, have a bipolar disorder or psychosis/psychotic symptoms. We will also exclude people currently receiving psychological therapy elsewhere.

### What does the study involve?

BA and CBT are two psychological treatments which are recommended by guidelines for the treatment of depression. Half our participants in the COBRA trial will receive BA and half CBT, allocated on a random basis. You will receive a maximum of 20 sessions over 16 weeks with the option of four additional booster sessions. You will receive face to face sessions, of one-hour duration, with the option of session being conducted up to twice weekly over the first two months and weekly thereafter.

BA involves a structured programme of organising increased contact with positive activities and reducing people's avoidance of important situations, other people and activities. CBT identifies and modifies negative automatic thinking and unhelpful beliefs to assist people develop more help ways of thinking and behaving in everyday situations and experiences.

### What are the possible benefits and risks of participating?

Both treatments are active psychological treatments which have previously demonstrated positive effects. This trial may be of benefit to people, since CBT is generally only available in the UK for 8-15% of people with depression. There are no known side effects for either treatment.

Where is the study run from?

The study will be taking place in three sites: Devon, Durham and Leeds with the lead centre being the University of Exeter's Mood Disorders Centre.

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

The study will begin in March 2012, the first participant will start treatment in September 2012 and the study will end in April 2016. Participants will be recruited from August 2012 until April 2014.

Who is funding the study?

The trial is funded by the UK National Institute for Health Research (NIHR) Health Technology Assessment (HTA) Programme Clinical Evaluation and Trials grant.

Who is the main contact?

Professor David Richards  
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## Contact information

### Type(s)

Scientific

### Contact name

Prof Dave Richards

### Contact details

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## Additional identifiers

### Protocol serial number

HTA 10/50/14

## Study information

### Scientific Title

COBRA (Cost and Outcome of Behavioural Activation): a two-arm Phase III, non-inferiority, patient level, randomised controlled trial of behavioural activation versus cognitive behaviour therapy

### Acronym

COBRA

## **Study objectives**

Clinical depression is one of the most common and debilitating of the psychiatric disorders. Lifetime prevalence has been estimated at 16.2% and rates of co-morbidity are high. Without treatment, up to 1/3 of all patients will have episodes that last longer than two years, and over 3/4 of all patients who recover from one episode will go on to have at least one more.

Depression is therefore a major health problem which causes substantial disability and is set to become the second largest cause of global disability by 2020. In the UK depression and anxiety are estimated to cost the economy £17bn in lost output and direct health care costs annually, with a £9bn impact on the Exchequer through benefit payments and lost tax receipts. Service user organisations and policy think tanks advocate psychological therapies for depression, which many patients prefer to antidepressants.

The project will seek to address two interlinked research questions:

1. What is the clinical effectiveness of Behavioural Activation (BA) compared to Cognitive Behaviour Therapy (CBT) for depressed adults in terms of depression treatment response measured by the PHQ9 at six, 12 and 18 months?
2. What is the cost-effectiveness of BA compared to CBT at 18 months?

We hypothesise that BA is non-inferior compared to CBT in reducing depression severity but that BA will be less costly and thus more cost-effective than CBT.

More details can be found at: <http://www.nets.nihr.ac.uk/projects/hta/105014>

Protocol can be found at: [http://www.nets.nihr.ac.uk/\\_\\_data/assets/pdf\\_file/0018/55440/PRO-10-50-14.pdf](http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0018/55440/PRO-10-50-14.pdf)

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

Not provided at time of registration

## **Study design**

Two-arm phase III non-inferiority patient level randomised controlled trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Depression

## **Interventions**

Behavioural Activation (BA): participants will receive a maximum of 20 sessions over 16 weeks with the option of four additional booster sessions. Sessions will be face to face, of one-hour duration, with the option of being conducted up to twice weekly over the first two months and weekly thereafter. They will consist of a structured programme increasing contact with potentially antidepressant environmental reinforcers through scheduling and reducing the frequency of negatively reinforced avoidant behaviours. Treatment will be based on a shared

formulation drawn from the behavioural model in the early stages of treatment, thereafter developed with the patient throughout their sessions. Specific BA techniques include the use of a functional analytical approach to develop a shared understanding with patients of behaviours that interfere with meaningful, goal-oriented behaviours and include self monitoring, identifying 'depressed behaviours', developing alternative goal orientated behaviours and scheduling. In addition the role of avoidance and rumination will be addressed through functional analysis and alternative response development. Mental health workers delivering BA will follow a revised treatment manual based on that used in our Phase II trial and previous international studies

Cognitive Behaviour Therapy (CBT): participants will receive a maximum of 20 sessions over 16 weeks with the option of four additional booster sessions. Sessions will be face to face, of one-hour duration, with the option of being conducted up to twice weekly over the first two months and weekly thereafter. They will consist of a structured, partially didactic programme. Treatment begins with patients learning the model, behavioural change techniques, and moves on to identifying and modifying negative automatic thoughts, maladaptive beliefs and underlying core beliefs. In later sessions, learning is translated to anticipating and practicing the management of stressors that could provoke relapse in the future. Specific CBT techniques include scheduling activity and mastery behaviours, the use of thought records and modifying maladaptive beliefs. Therapists delivering CBT will follow a treatment protocol based on the standard manuals published by Beck and colleagues.

### **Intervention Type**

Behavioural

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

Self-reported depression severity as measured by the PHQ9 at 12 & 18 months adjusting for baseline outcome values and stratification variables (symptom severity, site, antidepressant use) and fitting therapist as a random effects variable

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

1. Secondary process evaluation to investigate the moderating, mediating and procedural factors in BA and CBT which influence outcome
2. Direct and indirect costs of treatment and disease burden
3. Health-state utility (EQ5D)
4. DSM depression status and depression free days (SCID)
5. Health Related Quality of Life (SF-36)
6. Six month interim analysis on PHQ9

### **Completion date**

05/03/2016

## **Eligibility**

### **Key inclusion criteria**

1. Persons aged 18 and older and over (no upper age limit) with Major Depressive Disorder (DSM) assessed by standard clinical interview [Structured Clinical Interview for Depression (SCID)]
2. Researchers will be trained to administer the SCID using established training and inter-rater reliability procedures that are in use at the Mood Disorders Centre for all the trials

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

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Persons who are alcohol or drug dependent, acutely suicidal or cognitively impaired
2. Have a bipolar disorder or psychosis/psychotic symptoms, ascertained by baseline research interviews
3. People currently in receipt of psychological therapy

**Date of first enrolment**

01/08/2012

**Date of final enrolment**

01/04/2014

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**University of Exeter**

Exeter

United Kingdom

EX4 4QG

## **Sponsor information**

**Organisation**

University of Exeter (UK)

ROR

## Funder(s)

### Funder type

Government

### Funder Name

Health Technology Assessment Programme (Ref: 10/50/14)

### Alternative Name(s)

NIHR Health Technology Assessment Programme, Health Technology Assessment (HTA), HTA

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

United Kingdom

## Results and Publications

### Individual participant data (IPD) sharing plan

Not provided at time of registration

### IPD sharing plan summary

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	27/08/2016		Yes	No
<a href="#">Results article</a>	secondary analysis	01/12/2021	14/01/2022	Yes	No
<a href="#">Protocol article</a>	protocol	21/01/2014		Yes	No