Weight loss maintenance intervention for obese adults after clinically significant weight loss

Recruitment status No longer recruiting	[X] Prospectively registered		
	[X] Protocol		
Overall study status	Statistical analysis plan		
Completed	[X] Results		
Condition category	[] Individual participant data		
	No longer recruiting Overall study status Completed		

Plain English summary of protocol

Background and study aims

More and more people are becoming overweight which is a major problem worldwide. One in four adults in the UK is overweight. Being overweight can contribute to chronic illness, absence from work and reduced life expectancy. Many people manage to successfully lose weight, but often put it back on after a while. The aim of this study is to see if a new approach to weight loss maintenance can help people keep off the weight they have lost in the long term.

Who can participate?

Participants must be 18 years or older, have intentionally lost at least 5% of body weight in the last 12 months, and still weigh at least 5% less than they did previously.

What does the study involve?

After consent has been given, measurements will be taken which include weight, hip/waist circumference and body fat measurements, and an assessment of the level of physical activity. Questionnaires will also be completed. Participants will then be randomly selected to receive either the new approach, which includes a personal support session with a weight loss maintenance expert, or a less intense means of support in the form of a quarterly newsletter. The new approach has been developed by using digital scales and mobile phones that can access the internet. This approach can be tailored to each individual to help maintain weight loss. Information will be collected from participants which will help the team understand any changes in behaviour around maintaining weight loss. Questionnaires will be completed by participants and the level of physical activity will be assessed. Participants are in the study for a total of 12 months, but the new approach or newsletter will administered for the first 6 months of that time period only. At 6 months after study entry, participants will be sent a package of questionnaires which are to be completed and posted back to the team. At 12 months, participants will meet with a Research Team member again and the baseline measurements will be repeated.

Participants receiving the new approach will be asked to weigh themselves daily (at a regular, convenient time) on the scales provided; those receiving the less intense support will also be given scales. If participants forget to weigh themselves on more than one occasion, they will be

prompted to do so by text message. Weight measurements will be received by a central computer at Newcastle University, which will trigger the automatic delivery of messages individually tailored to the participant. Participants receiving the new approach will be asked to attend a personal support session to discuss weight maintenance plans, set goals and evaluate physical activity and food intake. Based on the goals set in this session, participants will receive a weekly text-message link to a small set of electronic weekly 'diary' questions about physical activity and eating goals. Participants who regain weight will be supported by information sent by text message, and a team member will also be available to speak with participants on the phone to give extra support.

What are the possible benefits and risks of taking part?

Participants may not benefit directly, although there may be benefit from some assistance with weight loss maintenance efforts. In addition, participants will have access to weight loss maintenance support, and the use of state of the art equipment. Participation will also help the team to find out how useful the approach is in helping participants to maintain weight loss and may be beneficial to those in the future. There are no physical risks in taking part in the study, although participants may not like the volume or type of text messages received, although these will be kept to a minimum.

Where is the study run from?

The research is organised by Dr Falko Sniehotta (Chief Investigator) and his team of staff in the Institute of Health and Society at Newcastle University.

When is the study starting and how long is it expected to run for? March 2014 to June 2015.

Who is funding the study?

The research has been funded by a grant from the Medical Research Council as part of the National Prevention Research Initiative. The study is sponsored by Public Health England.

Who is the main contact? Miss Jane Barnes jane.barnes@ncl.ac.uk

Contact information

Type(s)Scientific

Contact name

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Additional identifiers

Protocol serial number 16355

Study information

Scientific Title

A randomised, controlled trial with internal pilot of a weight loss maintenance intervention for obese adults after clinically significant weight loss

Acronym

NU:LEVEL

Study objectives

This is a randomised, controlled trial of a scalable, digital weight loss maintenance intervention to recruit participants from the community, who have lost at least 5% of body weight in the last 12 months.

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES Committee East Midlands - Derby, 06/02/2014, ref: 14/EM/0069

Study design

Randomised; Interventional; Design type: Prevention, Treatment

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: Primary Care Research Network for England; Subtopic: Not Assigned; Disease: All Diseases

Interventions

Participants will be randomised to receive either the new intervention or to receive a quarterly newsletter. Weight will be recorded daily (scales provided to participants) which are able to send weight data to a central server. Daily support will be given to those who receive the new intervention delivered as a combination of automated messages in response to weighing data or weekly questionnaires, delivered as text messages or mobile web content (text message with internet link), text messages generated by the intervention team and individual telephone calls. Full intervention is provided for 6 months. After six months, only the fully automatised components will be continued until the end of the study. Participants are followed up at 12

months. Economic and Psychological data will be collected at the beginning and end of the participant's involvement in the study.

Weight monitoring system, remote weight monitoring scales to record daily weight of participants; Follow Up Length: 12 month(s); Study Entry: Single Randomisation only

Power analysis and sample considerations: In order to detect a 2.5kg difference between the groups at 12 months, given a Type 1 error rate of 5% and assuming a standard deviation of weight gain of 6kg with 90% statistical power, two groups of 122 participants providing data on the primary outcome will be required; assuming a rate of 15% loss to follow-up. A total sample size of 288 participants recruited and randomised will be required.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Weight change (in kg) from baseline at 12 months post randomisation

Key secondary outcome(s))

Measures will be taken at baseline (in addition to service use, socioeconomic and demographic variables

Completion date

01/06/2015

Eligibility

Key inclusion criteria

- 1. Providing written informed consent for study participation prior to any study specific procedures
- 2. Aged 18 years or older (no upper limit)
- 3. Initial Body Mass Index (prior to weight loss) of 30 or higher (28 or higher for individuals of South Asian descent, i.e. with both parents of Indian, Sri Lankan, Pakistani or Bangladeshi origin or a combination thereof)
- 4. Written verification of at least 5% of weight lost in the last 12 months by a physician, weight loss counsellor or friend
- 5. Access to a mobile feature phone or smart phone with internet access to receive reminder messages regarding weight recordings, feedback and intervention assessments
- 6. Ability to use a standing scale for weight measurements
- 7. Target Gender: Male & Female ; Lower Age Limit 18 years

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Αll

Total final enrolment

288

Key exclusion criteria

- 1. Previous participation in pilots of this study
- 2. Inability to give informed consent
- 3. Individuals who have lost weight due to illness or surgical procedures, including bariatric procedures
- 4. Women who are pregnant or planning to become pregnant in the next year
- 5. Mothers who are breastfeeding
- 6. Current involvement in other intervention studies
- 7. Inability to understand written material or telephone conversations in English
- 8. Diagnosis of anorexia nervosa, bulimia nervosa or purging disorder, or screen positive for symptoms of any of these disorders eating at baseline
- 9. Diagnosis of any condition which may interfere with increasing mild to moderate physical activities such as walking. Baseline weight of over 175 kg (due to the measurement range of the scales)
- 10. Inability to use mobile phone technology
- 11. Travel; i.e. moving out of the area, long-term travel abroad or out of the area

Date of first enrolment

24/03/2014

Date of final enrolment

01/06/2015

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Newcastle University

Newcastle Upon Tyne United Kingdom NE2 4AX

Sponsor information

Organisation

Public Health England (PHE) (UK)

Funder(s)

Funder type

Research council

Funder Name

Medical Research Council (MRC); Grant Codes: MR/J000477/1

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	07/05/2019	08/05/2019	Yes	No
Protocol article	protocol	22/09/2015		Yes	No
HRA research summary			28/06/2023		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes