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COST and cost-effectiveness of models of care for children with Eating Disorders (CostED)

Submission date 25/09/2013	**Recruitment status** No longer recruiting	[X] Prospectively registered
Registration date 07/01/2014	**Overall study status** Completed	[_] Protocol
Last Edited 28/06/2021	**Condition category** Mental and Behavioural Disorders	[_] Statistical analysis plan
		[X] Results
		[_] Individual participant data

Plain English summary of protocol

Background and study aims
Anorexia nervosa is a serious mental health problem that can last for many years and carries a high risk of death from malnutrition. It is harmful for those affected and can place a considerable burden on families. Anorexia nervosa can be an expensive condition to treat, often involving lengthy admissions to hospital, which additionally has a negative impact on school and social life. Hospital admissions are not always helpful and readmission to hospital after discharge is common. In contrast, those who respond well to outpatient family therapy have lower rates of readmission to hospital inpatient care.
There are two main community-based services available for young people with anorexia nervosa. The first is standard care provided by general Child and Adolescent Mental Health Services (CAMHS). The second is specialist eating disorder care provided by dedicated, multi-disciplinary teams. There is some evidence that these specialist services are better at preventing hospital admissions and may be more acceptable to patients and their families than general CAMHS teams. Even so, specialist community services for young people with eating disorders are still rare in the British Isles and vary depending on geographical location.
One of the reasons why specialist services are rare is that they would require additional financial investment. Given the current financial difficulties facing the National Health Service, specialist services for anorexia nervosa are unlikely to be funded without clear evidence that savings will be made from this investment, alongside evidence that these services will have a positive effect on the health of patients and the quality of life of both patients and their families. This study will help to provide this evidence.
Our plan is to study the cost and the effectiveness of existing models of community services for young people with anorexia nervosa (either specialist or general CAMHS models of service). This will help us to determine whether increasing investment in specialist CAMHS services will be beneficial to patients and their families and will also be good value for money.

Who can participate?
We will include in the study any young person aged between 8 and 18 seen by a child and adolescent psychiatrist in a community-based CAMHS team and diagnosed with anorexia nervosa.

What does the study involve?
The study will collect information about all new cases of young people with anorexia nervosa across the British Isles over a 12-month period. We will use a survey system called the Child and Adolescent Psychiatric Surveillance System (CAPSS), which asks all child and adolescent psychiatrists to report new cases of particular mental health diagnoses.
Based on this information, we will study the different types of community-based care provided to each young person who enters the study and determine whether they are specialist services or general CAMHS services. This will enable us to classify all the different models of care available to young people with anorexia nervosa in the British Isles.
Nine months and 18 months later, we will contact each referring psychiatrist again in order to collect information on the services each young person received and the outcomes for young people, in terms of their health status. We will calculate the cost of the care provided and explore the cost-effectiveness of the different models of care (the benefits generated by each model of care in relation to the amount of money spent).
We will then look at the impact on cost and cost-effectiveness of possible changes to the provision of specialist services in the British Isles. In other words, we will look at the effect of increasing the provision of specialist services on the cost of services for child and adolescent anorexia nervosa and the benefits for young people of increased access to these services.

What are the possible benefits and risks of participating?
This study will help improve our understanding of the models of care currently available to young people with anorexia nervosa in the British Isles and help us to evaluate whether or not increased investment in specialist services is affordable to the NHS and would be of benefit to these young people.
We will collect good quality, real-world evidence of the costs, cost-effectiveness and potential cost-savings associated with different models of community-based care. This should help the NHS to organise services for young people with anorexia nervosa in a way that maximises the benefits to patients and their families, given the funding currently available.
The study aims to support improvements in the organisation of community-based services for anorexia nervosa that may lead to better use of NHS resources, better outcomes for young people, fewer hospital admissions, and less disruption to family, school and social life.
The risks to patients and their families are minimal because they will not be directly involved in the study. Data will be collected from child and adolescent psychiatrists and the information they provide will be anonymised to ensure it is not possible to identify any particular young person.

Where is the study run from?
The study will be led by Professor Sarah Byford at the Institute of Psychiatry, Kings College London. This is a collaborative project involving 12 investigators from a range of organisations (including the NHS, universities and national charities) and covering the British Isles.

When is the study starting and how long is it expected to run for?
December 2013 to May 2016

Who is funding the study?
The National Institute for Health Research (NIHR) Health Services and Delivery Research (HS&DR) programme and the Health and Social Care (Northern Ireland) Research & Development Division (UK)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
HS&DR 11/1023/17

Study information

Scientific Title
The cost and cost-effectiveness of community-based models of care for child and adolescent anorexia nervosa

Acronym
COSTED

Study objectives
1. Assessment and treatment by highly specialist or tertiary specialist community-based eating disorder services for child and adolescent anorexia nervosa (AN) in the British Isles will be less costly to the health service over 18 months than assessment and treatment by or referral via generic (non-specialist) child and adolescent mental health services (CAMHS) or eating disorder teams located within generic community CAMHS.
2. Assessment and treatment by highly specialist or tertiary specialist community-based eating disorder services for child and adolescent AN in the British Isles will be more cost-effective from the health service perspective over 18 months than assessment and treatment by or referral via generic (non-specialist) CAMHS or eating disorder teams located within generic CAMHS.
3. Increasing the availability of highly specialist or tertiary specialist community-based eating disorder services for child and adolescent AN will be cost-saving to the health service over the medium to long term.

Ethics approval required
Old ethics approval format

Ethics approval(s)

1. King's College London Research Ethics Committee, 27/02/2014, ref: PNM/13/14-105
2. Health Research Authority Confidentiality Advisory Group, 26/08/2014, ref: CAG 4-03(PR1)/2014
3. Child and Adolescent Psychiatry Surveillance System (CAPSS), 14/01/2015

Study design

Observational multi-centre naturalistic surveillance study and decision analytic modelling

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Child and adolescent anorexia nervosa

Interventions

This is a naturalistic study that will involve mapping alternative models of care provided to young people with anorexia nervosa across the British Isles and the Republic of Ireland. The research will explore the costs and effects of different types of community-based care provided to young people with anorexia nervosa and create a classification of service types available. Whilst classification will form part of the research, we anticipate services will fall into three main categories: generic Child and Adolescent Mental Health Services, specialist Child and Adolescent Mental Health Services and tertiary specialist Child and Adolescent Eating Disorder Service. Observation will take place at baseline, when young people referred to community-based services are notified to us via the Child and Adolescent Psychiatric Surveillance System (CAPPS) and at two follow-up points, 9 months and 18 months after baseline, when data on health service use and health outcomes will be collected. The data will be used to estimate the cost-effectiveness of the different models of care (the effects generated by each model of care in relation to the amount of money spent) and to determine whether increasing the provision of specialist services would be beneficial to young people and their families and good value for money.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Health service use including frequency and length of inpatient admissions and number of hospital or community-based outpatient contacts, and the cost of these services. Measured at baseline, 9 and 18 months after baseline.

Key secondary outcome(s))

1. Age-adjusted percentage median body mass index (BMI)
2. Health of the Nation Outcome Score for Children and Adolescents (HoNOSCA), a routine outcome measurement tool that assesses behaviours, impairments, symptoms, and social functioning of children and adolescents with mental health problems.

3. Outcome category according to the Morgan and Russell criteria, a widely used measure of outcome for anorexia nervosa.

Outcomes will be measured at baseline, 9 and 18 months after baseline.

Completion date
31/10/2017

Eligibility

Key inclusion criteria
1. Male and female aged 8 to 18 years
2. In contact with community-based mental health services
3. Meeting diagnostic criteria for anorexia nervosa or eating disorders not otherwise specified that closely resemble anorexia nervosa (EDNOS-AN)

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
8 years

Upper age limit
18 years

Sex
All

Total final enrolment
305

Key exclusion criteria
We will only exclude those cases of young people whose clinician-reported data is insufficient to assess eligibility

Date of first enrolment
01/02/2015

Date of final enrolment
30/09/2015

Locations

Countries of recruitment

United Kingdom

England

Ireland

Study participating centre
King's Health Economics
London
United Kingdom
SE5 8AF

Sponsor information

Organisation
King's College London (UK)

ROR
https://ror.org/0220mzb33

Funder(s)

Funder type
Government

Funder Name
Health Services and Delivery Research Programme (11/1023/17)

Alternative Name(s)
Health Services and Delivery Research (HS&DR) Programme, NIHR Health Services and Delivery Research (HS&DR) Programme, NIHR Health Services and Delivery Research Programme, HS&DR Programme, HS&DR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Funder Name
The Health and Social Care (Northern Ireland) Research & Development Division (UK)

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are not expected to be made available as a result of the collection of confidential patient data without consent, and approval from the Health Research Authority (following advice from the Confidentiality Advisory Group) for data to be provided for the purposes of the specified activity only.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	22/10/2019	22/10/2020	Yes	No
Results article	cost-effectiveness results	26/06/2021	28/06/2021	Yes	No
Basic results		26/05/2020	26/05/2020	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes