

Institution: University of Oxford		
Unit of Assessment: 4 – Psychology Psychiatry and Neuroscience		
Title of case study: Broader access to a new and effective treatment for a wide range of eating disorders		
Period when the underpinning research was undertaken: 2001 - 2017		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Christopher Fairburn	Professor of Psychiatry	1981 - 2017
Zafra Cooper	Clinical Research Fellow	1991- 2016
Marianne O'Connor	Senior Project Manager	1982 - 2017
Kristin Bohn	Clinical Psychologist	2001 - 2012
Rebecca Murphy	Clinical Psychologist	2005 - present
Suzanne Bailey-Straeble	Clinical Nurse Therapist	2006 - 2015
Period when the claimed impact occurred: August 2013 – December 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>Researchers at the University of Oxford's Centre for Research on Eating Disorders (CREDO), led by Fairburn, successfully developed and evaluated a new psychological treatment that is effective across the wide range of eating disorders. The use of this new treatment has been strongly endorsed by NICE in its guidelines for eating disorders and the Chief Medical Officer recommended that it be made available in all NHS Clinical Commissioning Groups. In order to maximise access to the new treatment, CREDO developed and evaluated a novel web-based method for training therapists, that has proved to be effective and widely adopted. More than 3,500 therapists from 40 countries worldwide have received training thereby greatly accelerating access to the new effective treatment for eating disorders. Based on the number of therapists trained in the NHS, it is estimated that at least 30,000 patients in England have received CBT-E during the impact period.</p>		
2. Underpinning research		
Background		
<p>Eating Disorders are group of mental health disorders that have a major, and often enduring, impact on psychological and physical wellbeing. They comprise anorexia nervosa, bulimia nervosa, binge eating disorder, and a large residual group often termed the "atypical eating disorders". Conventionally, the three main eating disorders have been viewed as distinct, difficult-to-treat conditions, each requiring their own form of treatment.</p>		
The New Transdiagnostic Treatment and its Evaluation		
<p>Oxford research reconceptualised the eating disorders, postulating that eating disorders were maintained by shared mechanisms [1] - the major implication of this reconceptualisation was that the eating disorders should respond to a single treatment, one which targeted these maintaining mechanisms [1]. Accordingly, the Oxford research team led by Fairburn developed a treatment designed to do this: CBT-E, a novel form of cognitive behaviour therapy.</p>		
<p>As part of their Impact Case Study for REF2014, the Oxford team described the development of CBT-E [1] and its evaluation in an initial randomised controlled trial using a transdiagnostic sample and a waiting list control [2]. Since then, the team has conducted a second randomised controlled clinical trial [3]. As well as confirming that CBT-E is transdiagnostic and more potent than earlier forms of CBT, the trial showed that CBT-E is more effective than a leading</p>		

alternative treatment for eating disorders (interpersonal psychotherapy, IPT). In addition, Fairburn has been co-principal investigator in three further randomized controlled trials in Italy, Denmark and Australia that have confirmed the effectiveness of CBT-E.

The new CBT-E treatment has also been the subject of systematic reviews, performed independently of CREDO, the findings of which strongly support the effectiveness of CBT-E.

A New Method for Disseminating Psychological Treatments and its Evaluation

A consequence of the success of this work was that it created a substantial demand for training in CBT-E during the REF2021 impact period. This was not possible to meet with the conventional, workshop-based methods of training therapists, which are both costly and inefficient. Fairburn and colleagues therefore developed a novel scalable form of training, one of which was web-based and could be accessed by unlimited numbers of therapists from anywhere in the world. Importantly, the training programme was also designed to be used autonomously (i.e., without external support), further increasing its scalability.

The Centre for Research on Eating Disorders at Oxford (CREDO) then evaluated the effectiveness and acceptability of this new form of training. First, a proof-of-concept study was conducted involving mental health professionals in the Irish Health Service Executive, who were provided with access to web-centred training in CBT-E accompanied by non-specialist guidance. This training was found to be feasible and acceptable and resulted in a marked increase in therapist competence [4]. Next, CREDO conducted a randomised controlled trial that recruited therapists from across the USA and Canada [5]. This trial involved a comparison of autonomous training (website access alone) with supported training (website access plus telephone-based support): both were found to be equally effective and the effects of training were sustained. Together, the findings of these studies found that web-based training is highly effective, whether delivered autonomously or with support, and is popular with therapists.

3. References to the research

(authors in bold employed by University of Oxford at time research conducted)

1. **Fairburn CG, Cooper Z, Shafran R.** Cognitive behaviour therapy for eating disorders: A “transdiagnostic” theory and treatment. *Behaviour Research and Therapy* (2003) 41: 509-528. DOI: [10.1016/s0005-7967\(02\)00088-8](https://doi.org/10.1016/s0005-7967(02)00088-8)
Presentation of a new, broader theory concerning the mechanisms that maintain eating disorders and a transdiagnostic treatment (CBT-E) based upon it.
2. **Fairburn CG, Cooper Z,** Doll HA, **O'Connor ME, Bohn K,** Hawker DM, Wales JA, Palmer RL. Transdiagnostic cognitive behavioural therapy for patients with eating disorders: A two-site trial with 60-week follow-up. *American Journal of Psychiatry* (2009) 166: 311-319. DOI: [10.1176/appi.ajp.2008.08040608](https://doi.org/10.1176/appi.ajp.2008.08040608)
Two-centre RCT confirming that CBT-E was transdiagnostic in its scope and appeared to be more potent than earlier cognitive behavioural treatments for eating disorders.
3. **Fairburn CG, Bailey-Straebler S, Basden S,** Doll HA, Jones, R, **Murphy R, O'Connor ME, Cooper Z.** A transdiagnostic comparison of enhanced cognitive behaviour therapy (CBT-E) and interpersonal psychotherapy in the treatment of eating disorders. *Behaviour Research and Therapy* (2015); 70: 64-71. DOI: [10.1016/j.brat.2015.04.010](https://doi.org/10.1016/j.brat.2015.04.010)
The second RCT to evaluate CBT-E, replicating the findings of [2], confirming that CBT-E is transdiagnostic and more potent than earlier forms of CBT. It was also found to be more effective than the leading alternative, IPT.
4. **Fairburn CG,** Allen E, **Bailey-Straebler S, O'Connor ME, Cooper Z.** Scaling-up psychological treatments: A countrywide test of the online training of therapists. *Journal of Medical Internet Research* (2017) 19: e214. DOI: [10.2196/jmir.7864](https://doi.org/10.2196/jmir.7864)
Web-centred training in CBT-E accompanied by non-specialist guidance was found to be feasible, effective and acceptable.

5. **Cooper Z**, Allen E, **Bailey-Straebler S**, **Morgan KE**, **O'Connor ME**, Caddy C, Hamadi L, **Fairburn CG**. Using the internet to train therapists: A randomised comparison of two scalable methods. *Journal of Medical Internet Research* (2017) 19: e355.
DOI: [10.2196/jmir.8336](https://doi.org/10.2196/jmir.8336).
Therapists from across the United States and Canada were randomly assigned to receive web-based CBT-E training either independently or with support. Both methods were found to be equally effective and the effects of training were sustained.

Wellcome Trust funding to Fairburn at the University of Oxford:

Principal Research Fellowship, "Eating disorders and obesity: cognitive processes and treatments" £ 1,699,652 (046386/Z/95/B, 2001-2008).

Principal Research Fellowship Renewal, "Transdiagnostic cognitive behaviour therapy for eating disorders: efficacy and mechanisms of action" £3,974,171 (079113/Z/06/Z, 2006-2014).

Strategic Award, "The use of the internet to train clinicians to implement psychological treatments" £1,909,407 (094585/Z/10/Z, 2011-2017) and follow-on

Strategic Award Enhancement, "The dissemination of psychological treatments" £149,482 (094585/Z/10/A, 2013-2017).

4. Details of the impact

Improvements to quality of life for people with eating disorders

In the UK alone, there are an estimated two million people with eating disorders. The prevalence of eating disorders varies between countries, but estimates place the total prevalence, across the different forms, as around 4% of those over 16 years of age. Most cases of eating disorders are self-perpetuating in the absence of effective treatment.

Taken together, the findings from clinical trials provided a substantial body of work demonstrating the effectiveness of CBT-E can treat all forms of eating disorder and that it is as effective, or more effective, than the main alternative treatments. For example, one of the systematic reviews of the effects of CBT-E, conducted independently of the Oxford team, concluded that there is robust evidence to support its effectiveness, ending their abstract with the statement that "*There is robust evidence that CBT-E is an effective treatment for patients with an eating disorder*" [A].

In terms of specific benefit to patients, the Oxford studies showed that around a half to two-thirds of patients who received CBT-E recovered from the eating disorder. Almost half of the patients who received CBT-E reported no binge eating, self-induced vomiting or laxative misuse at the end of treatment [3]. These studies also demonstrated that the benefits of CBT-E are well maintained one year later, despite the patients in these studies having had an eating disorder for eight years on average [2,3]. Importantly, a significantly greater proportion of patients receiving CBT-E recovered by the end of the treatment (66%) compared to those receiving an alternative leading psychological treatment, Interpersonal Psychotherapy (33%) [3]. The findings also indicated that improvements following CBT-E extended meaningfully beyond the eating disorder, including important reductions in depressive features, that were maintained beyond 1 year [3].

Impact on healthcare policy

The clinical and research findings on CBT-E led the Chief Medical Officer in her 2014 annual report to recommend its wide use:

"I recommend that Clinical Commissioning Groups ensure prompt access to evidence-based enhanced cognitive behaviour therapy (CBT-E) and family-based therapy for eating disorders. This should be available in all areas, as in the NICE guidance, and not restricted to specific age groups." [B, page 12].

In 2015, NHS England published access and waiting time standards for the treatment of younger patients with an eating disorder. It too specified that there should be prompt access to CBT-E as well as to a specific form of family therapy [C, pages 24 and 45].

In 2017 the National Institute for Health and Care Excellence (NICE) published new clinical guidelines on the treatment of eating disorders [D], strongly endorsing CBT-E. The guidelines state that CBT-E (referred to as CBT-ED) is the leading specialist treatment for bulimia nervosa [D, p.20] and binge eating disorder [D, p.19] and one of three leading specialist treatments for anorexia nervosa [D, p.11-12] in adults. For younger patients, CBT-E was one of the two leading recommended treatments for all three eating disorders [D p.15, 20 and 22] (the other treatment being a specific form of family therapy).

Impact on clinical practice with worldwide reach

3,500 therapists worldwide, across 40 countries, have received the free web-based CBT-E training programme that CREDO have shown to be effective [E, F], including 1,200 therapists within the NHS. The last annual survey of users' experience of this training has shown that 98% would recommend it to others and over 90% have found it to be very helpful [G]. Testimonials from clinicians include:

"We have found your online training to be extremely valuable for our clinicians. It is very reassuring to know that my clinicians have received world class training in CBT-E and I have observed first-hand the value of this during our clinic meetings and supervision sessions."
(Clinical Director, Western Australia, 2020) [Hi]

"I continue to use the treatment myself with patients and also supervise others in use of the CBT-E model. I often consult the online training resources for myself and use them additionally as a supervision tool. The scalability of this mode of delivery has meant that therapists who are relatively novice in eating disorders can have flexible access to modern training techniques to supplement the delivery of their treatment."
(Clinical Psychologist, describing work in a private service) [Hii]

The additional face-to-face workshops held by CREDO have supplemented the web-based programme, training a further 750 therapists (who have not taken part in the web-based training), including 300 NHS therapists. CREDO also provided two advanced workshops for 300 therapists already trained in CBT-E from a diverse range of countries.

In total, around 1,500 NHS professionals have received training in CBT-E from the CREDO research group using both forms of training since 2013. Following consultation with trainees, it is estimated that the average therapist who has participated in this training will have treated at least 20 cases using CBT-E. This suggests that at least 30,000 patients have received CBT-E. In addition to the research studies supporting the effectiveness of CBT-E there are numerous positive reports from clinicians using CBT-E in the real-world. For example, an outpatient service described that:

"As a team, we implemented CBT-E across the outpatient service in around 2014 [as] we felt close adherence to the CBT-E model would help more of our patients get better. ... I believe that the service we provided to the patients was of exceptional quality and this was supported in large part by the work of the CREDO team and their materials."
(Clinical Psychologist, for work in an NHS eating disorders service) [Hii]

and an inpatient unit that introduced CBT-E in 2016 reported that:

"... we have experienced a transformation of the clinical service, not only in the practice, but also the philosophy of collaboratively working with patients.. We have been able to discharge 5 to 6 patients completely from services to the care of a [GP] with full remission of eating disorder symptoms and restoration of weight. In the previous 26 years of practice I have not been able to discharge patients in a similar manner."
(Consultant Adolescent Psychiatrist, NHS inpatient unit) [Hiii]

In response to high levels of demand for information about CBT-E during the REF period, in 2020 CREDO, together with Italian colleagues, launched a dedicated website [I]. This website

provides up to date information on CBT-E for members of the public (whether they are patients or family members) and health professionals. A recent analysis of its use over a ten-month period showed that over 30,000 users from 144 countries accessed this website [J].

5. Sources to corroborate the impact

- A. de Jong M, Schoorl M, Hoek HW. Enhanced cognitive behavioural therapy for patients with eating disorders: a systematic review. *Current Opinion in Psychiatry* (2018); 31: 436-444. DOI: [10.1097/YCO.0000000000000452](https://doi.org/10.1097/YCO.0000000000000452)
- B. Annual Report of the Chief Medical Officer, 2014. <http://www.gov.uk/government/publications/chief-medical-officer-annual-report-2014-womens-health>
- C. NHS England. Access and Waiting Time Standard for Children and Young People with an Eating Disorder, Commissioning Guide, July 2015. <http://www.england.nhs.uk/wp-content/uploads/2015/07/cyp-eating-disorders-access-waiting-time-standard-comm-guid.pdf>
- D. National Institute for Healthcare Excellence. Eating Disorders: Recognition and Treatment (Full guideline). NICE, 2017. <http://www.nice.org.uk/guidance/ng69>
- E. Cooper Z, Allen E, Bailey-Straebler S, Morgan KE, O'Connor ME, Caddy C, Hamadi L, Fairburn CG. Using the internet to train therapists: A randomised comparison of two scalable methods. *Journal of Medical Internet Research* (2017)19: e355. doi: [10.2196/jmir.8336](https://doi.org/10.2196/jmir.8336)
- F. O'Connor ME, Morgan KE, Bailey-Straebler S, Fairburn CG, Cooper Z. Increasing the availability of psychological treatments: A multinational study of a scalable method for training therapists. *Journal of Medical Internet Research* (2018) 20; e10386. doi: [10.2196/10386](https://doi.org/10.2196/10386)
- G. CBT-E Web-based Training Annual Progress Report for Health Education England, 2019. CREDO and Oxford Health NHS Foundation Trust.
- H. (i) Letter from Clinical Director, The Swan Centre, Western Australia (27/10/2020); (ii) Email from Clinical Psychologist, Cotswold House Eating Disorders Service, Oxford Health NHS Foundation Trust, (18/10/2020); (iii) Email from Consultant Adolescent Psychiatrist, Highfield Unit, Warneford Hospital (17/10/2020).
- I. Enhanced Cognitive Behaviour Therapy (CBT-E) Information Website www.cbte.co, including separate pages provided for the public and for professionals.
- J. Google Analytics for <https://www.cbte.co> (1st March-16th December 2020). Overview and Map Overlay.