# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## HEALTHTECH PROGRAMME

# Digital self-help for people with eating disorders: early value assessment

## Final scope

## 1. Introduction

NICE early value assessment (EVA) considers technologies which address national unmet need, rapidly assessing products early in the life cycle that need further evidence to support wider adoption. It will review the evidence that is available, assess the potential clinical and cost-effectiveness of the technologies, and identify evidence gaps to help further evidence generation. The technologies included in this evaluation offer NICE-recommended psychological treatment, self-help, for people with eating disorders in a digital format. This document describes the context and the scope of the assessment.

## 2. The condition

It is estimated that at least 1.25 million people in the UK have an eating disorder. Eating disorders are described as mental health conditions where controlling food is used to cope with feelings and situations (Beat). Among the most common eating disorders are anorexia nervosa (anorexia), binge eating disorder and bulimia.

Having anorexia means trying to control weight by not eating enough food, exercising too much, or doing both. Having a binge eating disorder means eating very large quantities of food without feeling in control of it, for example eating much faster than normal, until feeling uncomfortably full, eating large amounts of food when not physically hungry or eating alone through embarrassment at the amount being eaten, and feelings of disgust, shame or

guilt during or after the binge. People with bulimia cycle between bingeing and trying to compensate for the overeating by vomiting, taking laxatives or diuretics (purging), fasting, or exercising excessively. When symptoms are similar to anorexia, binge eating disorder or bulimia but they do not exactly fit the typical symptoms for these conditions, the condition may be diagnosed as other specified feeding or eating disorder (OSFED). Disordered eating refers to food- and diet-related behaviours that do not meet diagnostic criteria for recognised eating disorders but may still negatively affect physical, mental, or emotional health.

## Current practice

In the NHS, the identification, risk assessment and treatment of eating disorders follow the NICE eating disorder guideline (NG69), NICE eating disorders quality standard (QS175), NHS England access and waiting time standard for children and young people with an eating disorder and NHS England guidance for adult eating disorder services and Royal College of Psychiatrists guidance on medical emergencies in eating disorders.

A list of related NICE guidance can be found in Appendix A of this document.

### 2.1 Referral for assessment and treatment

Signs of eating disorders can be noticed in many settings like school, university, work, home or social care. Often the first healthcare contact who will do an initial assessment is a GP (more guidance on referral pathways for children and young people is in NHS England access and waiting time standard). The initial assessment should involve asking questions about eating habits, checking overall health and looking for signs of eating disorder (NICE eating disorder guideline [NG69] provides more details). After the initial assessment, people with a suspected eating disorder should be immediately referred to a community-based, age-appropriate eating disorder service for further assessment or treatment.

People with eating disorders should be assessed and receive treatment at the earliest opportunity. Children and young people considered at high risk should

have an assessment and start NICE-recommended treatment within 1 week. Otherwise, in routine (non-urgent) cases, assessment and treatment should be offered within 4 weeks (NHS England access and waiting time standard for children and young people with an eating disorder). Starting treatment for adults should follow a locally agreed timeframe NICE eating disorders quality standard (QS175). The services should aim to maximise access and minimise waits.

## 2.2 Psychological treatments for eating disorders

The NICE recommends psychological treatments for eating disorders, as summarised in Table 1. Guided self-help programmes are the first treatments to offer or consider for all people with binge eating disorder or OSFED with similar symptoms and adults (people aged 18 or over) with bulimia or OSFED with similar symptoms.

The NICE eating disorder guideline (NG69) recommends that guided self-help programmes should:

- use cognitive behavioural self-help materials for eating disorders
- supplement the self-help programme with brief supportive sessions (for example, 4 to 9 sessions lasting 20 minutes each over 16 weeks, running weekly at first)

In current practice, the guided self-help involves working through a printed or an online or electronic book about binge eating or bulimia. The brief supportive sessions are intended to support motivation and commitment, and help the person to follow the self-help programme. They are not intended for delivery of psychological therapy. The sessions are usually remote, virtual meetings or phone calls with a mental health nurse or an assistant psychologist. Clinical experts explained that in practice, guided self-help may not be considered suitable for very young children (for example aged 13 or younger). Some may not yet be able to read and some of the content might not be developmentally appropriate or understood by them in the same way

as older children or adults would understand it. The guided self-help programmes are not designed to help lose or gain weight.

The NICE eating disorder guideline (NG69) does not currently include a recommendation to offer guided self-help for people with diagnosis of anorexia or for children and young people with bulimia.

The NICE eating disorder guideline (NG69) provides more detail on the other psychological treatment options and describes physical health assessment, monitoring and management for eating disorders. Medication should not be offered as the only treatment and physical therapy should not be offered as part of the treatment for any eating disorder.

**Table 1. Summary of NICE-recommended psychological treatments for anorexia, binge eating disorder, bulimia and other specified eating disorder (OSFED) in children and young people and adults**

| | **Anorexia** | **Binge eating disorder** | **Bulimia** | **Other specified eating disorder (OSFED)** |
|---|---|---|---|---|
| **Children and young people** | Consider:<br>• anorexia-nervosa-focused family therapy (FT-AN), as single-family therapy or a combination of single- and multi-family therapy<br>If this is unacceptable, contraindicated or ineffective, consider:<br>• individual eating-disorder-focused cognitive behavioural therapy (CBT ED) or<br>• adolescent-focused psychotherapy for anorexia nervosa (AFP AN) | Offer:<br>• a binge-eating-disorder-focused guided self-help programme<br>If this is unacceptable, contraindicated, or ineffective after 4 weeks, offer:<br>• group CBT-ED<br>If group CBT-ED is not available or the person declines it, consider:<br>• individual CBT-ED | Offer:<br>• bulimia-nervosa-focused family therapy (FT-BN)<br>If this is unacceptable, contraindicated or ineffective, consider:<br>• individual CBT-ED | Consider:<br>• using the treatments for the eating disorder it most closely resembles |
| **Adults** | Consider one of:<br>• individual CBT-ED<br>• Maudsley Anorexia Nervosa Treatment for Adults (MANTRA) | Offer:<br>• a binge-eating-disorder-focused guided self-help programme<br>If this is unacceptable, contraindicated, or ineffective after 4 weeks, offer: | Consider:<br>• bulimia-nervosa-focused guided self-help programme<br>If this is unacceptable, contraindicated, or ineffective after 4 weeks of treatment, consider: | Consider:<br>• using the treatments for the eating disorder it most closely resembles |

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| | • specialist supportive clinical management (SSCM)<br>If individual CBT-ED, MANTRA or SSCM is unacceptable, contraindicated or ineffective, consider:<br>• one of these 3 treatments the person has not had before or<br>• eating-disorder-focused focal psychodynamic therapy (FPT) | • group CBT-ED<br>If group CBT-ED is not available or the person declines it, consider:<br>• individual CBT-ED | • individual CBT-ED | |

## 3. Unmet need

Eating problems and eating disorder incidence are increasing. According to the NHS England Mental health of children and young people report, the proportion of 11- to 16-year-olds indicating possible eating problems increased from less than 7% in 2017 to over 12% in 2023. The proportion of 17- to 19-year-olds indicating possible eating problems increased from over 44% in 2017 to nearly 60% in 2023. The prevalence of clinically diagnosed eating disorders increased from less than 1% in 2017 to over 2% in 11- to 16-year-olds and to over 12% in 17- to 19-year-olds in 2023. More referrals to specialist care and the healthcare professional capacity needed for the currently available treatment options mean that the services cannot meet the increasing need for psychological treatment. The NHS England access and waiting time standard for children and young people with an eating disorder target that (by 2020/21) 95% of those referred should start NICE-recommended treatment within 1 week in urgent cases and 4 weeks in routine cases has not yet been met. According to the NHS Digital's Mental Health Services Monthly Statistics on services for children and young people, cited in the Nuffield Trust indicator report, in the third trimester of the year 2023/24, 64% of urgent cases started treatment within 1 week and 79% of routine cases within 4 weeks. During this same time, over 400 urgent cases and over 2,300 routine cases had started treatment but around 1,000 urgent cases and over 5,200 routine cases were recorded waiting (some people may have been transitioning between children and young people and adult services).

Earlier treatment could help prevent the condition from becoming more severe by helping to prevent both physical and mental health decline. There is an unmet need for a treatment option that could start as soon as possible eating problems are identified or an eating disorder is diagnosed.

## 4. The technologies

This section describes the properties of the technologies based on information provided to NICE by manufacturers and experts, and publicly available

information. NICE has not carried out an independent evaluation of these descriptions.

The technologies included in this evaluation can be used to offer NICE-recommended CBT-ED-based self-help therapy for eating disorders in a digital format. All the technologies can be used as a guided intervention as part of the current format of the self-help but they are designed to work without the brief adherence supporting sessions. In this NICE assessment, they will be assessed for this independent use.

Sections 5.1 to 5.3 and table 2 describe the 3 included technologies. All the included technologies were available to the NHS at the time of writing this scope.

Technologies offering only psychoeducation, remote monitoring, signposting, wellness content, peer support or support for parents or carers are not included in this assessment.

## 4.1 Digital CBTe (Credo Therapies)

Digital CBTe is a programme-led CBT-ED-based psychological treatment for people who experience recurrent binge eating including people with bulimia, binge eating disorder and other specified eating disorders (OSFED) with similar symptoms. It is accessible via a smartphone app or website. It is intended for independent use for people aged 18 or over. The programme takes 8 weeks to complete. The programme can be accompanied by the Digital CBTe clinician dashboard for monitoring adherence and tracking outcomes. Digital CBTe is not indicated for people who have a low body weight (BMI under 18.5), who are weight suppressed, rapidly losing weight or at risk of suicide or self-harm.

## 4.2 Overcoming Bulimia Online (Five Areas)

Overcoming Bulimia Online is an online CBT-ED-based self-help resource for people who binge-eat especially bulimia nervosa, binge eating disorder, OSFED with similar symptoms and milder non-diagnostic partial syndromes. It

is intended for independent use for people aged 16 or older. The programme has 8 sessions. Overcoming Bulimia Online is not suited for people with high severity eating disorder or risk that would make more specialist and more monitored 1-to-1 support appropriate. It is currently not intended for anorexia nervosa.

## 4.3 Worth Warrior (stem4)

Worth Warrior is a CBT-ED-based self-help smartphone app that helps young people manage negative body image, low self-worth, and related early-stage eating difficulties or disorders. The app can be personalised by the user to suit anorexia, bulimia, binge eating disorder or avoidant restrictive food intake disorder (ARFID) and OSFED with similar symptoms. It is intended for independent use for people aged 12 and older. If a younger person would like to use the app, it is recommended that this is done under the guidance of a responsible adult. The independent use of the app is suitable for a mild to moderate eating disorders. If a moderate-severe eating disorder has been diagnosed, the app should be used under the guidance of a health professional. A customised version adding collation of localised data (for example postcode), adding signposts to local services, clinical safety re-assessment, and hosting can be created for service providers.

**Table 2 Summary of the included technologies**

| Technology (provider) | Target condition or symptoms of | Type of therapy | Intended age group | Format |
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| Digital CBTe (Credo Therapies) | • Binge eating disorder<br>• Bulimia<br>• Other specified feeding or eating disorder (OSFED) with symptoms similar to binge eating disorder or bulimia | Self-help programme (guided and independent use), individual CBT-ED (self-help mode) | 18 years and above | • Smartphone app<br>• Online |
| Overcoming Bulimia Online (Five Areas) | • Binge eating disorder<br>• Bulimia<br>• OSFED with symptoms similar to binge eating disorder or bulimia | Self-help programme (guided and independent use), individual CBT-ED (self-help mode) | 16 years and above | • Online |
| Worth Warrior (stem4) | • Anorexia<br>• Avoidant restrictive food intake disorder (ARFID)<br>• Binge eating disorder<br>• Bulimia<br>• OSFED with symptoms similar to the above conditions | Self-help programme (guided and independent use), individual CBT-ED (self-help mode) | 12 years and above (under 12 with adult guidance) | • Smartphone app |

### 4.4 The place of technologies in the care pathway

This assessment will assess the use of the digital self-help technologies placed:

- after initial assessment in primary care
- after specialist assessment in eating disorder services

The technologies will be assessed for independent use without supportive sessions by a healthcare professional. So, this assessment assumes that digital self-help can be offered without waiting.

The 3 technologies will only be assessed within their intended use in terms of target condition and age group.

### 4.5 Innovative aspects

Digital self-help programmes are designed to support individuals working through the CBT-ED based self-help treatment without the involvement of a healthcare professional. So, their use does not depend on healthcare professional capacity to provide support, and could offer people with signs and symptoms of eating disorders faster access to eating disorder therapy.

## 5. Comparator

The comparator in this assessment is usual care. This may include:

- further appointments at the GP practice
- signposting to voluntary, community and social enterprise organisations, for example, eating disorder charities
- books or online resources
- local groups or telephone helplines for additional support
- further appointments at the eating disorder service (for people with a referral).

# 6. Patient issues and preferences

People with less severe eating disorders may wait longer for treatment because of limited service capacity and while waiting, the eating disorder may become more severe and it may take a longer time to recover. Some people with an eating disorder may find it difficult or distressing to discuss it with healthcare professionals or other service users. Some may be vulnerable to stigma or shame and need information and interventions tailored to their age, their level of development or to fit in with their usual activities. Digital self-help could improve access to treatment in a format that some people find more comfortable to use, in their own space and time. Some people may find it difficult to stay engaged with the treatment in an independent digital format and prefer self-help supported by a person. People may have concerns about the use of digital technologies for example data security or their ability to use the technology effectively. They may also have concerns about using a digital technology because they may feel digital technology such as social media, has contributed to their condition or symptoms. People should be supported by healthcare professionals to make informed decisions about their care, including the use of digital technologies.

# 7. Potential equality issues

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with protected characteristics and others.

## 7.1 Potential equality issues relating to the condition

- Eating disorders are more commonly diagnosed in people who are younger, female and from a white ethnic group
- People who are older or from minority ethnic backgrounds, or do not identify as women may find it difficult to seek help for an eating disorder, or the eating disorder may not be appropriately recognised or diagnosed because of reduced awareness of eating disorders in these groups

- People with neurodiverse conditions may be at a greater risk for developing eating disorders
- Binge eating disorder can cause weight gain and this may lead to other health conditions such as high blood pressure, high cholesterol, type 2 diabetes and heart disease.

## 7.2 Potential equality issues relating to the technology

Some people may particularly benefit from having access to digital self-help programmes, for example:

- People with less severe eating disorders who may otherwise wait longer for treatment when treatment of more severe eating disorders is prioritised because of limited capacity
- People who live in geographical areas with less available specialist eating disorder service capacity
- Some children and young people may have increased engagement with self-help treatment in an interactive digital format than with book in a printed or electronic format
- Some children and young people may not have the family or carer support to ensure they attend supportive sessions during therapy.

Some people may find it more difficult or may not be able to use the digital self-help programmes, for example:

- People with neurodiverse conditions
- People with a learning disability
- People with a visual, hearing or cognitive impairment
- People with problems with manual dexterity
- People who are less used to using digital technologies in general
- People who do not have access or private access to smart phone, tablet or a computer or internet (if internet is needed).

If digital self-help programmes are designed with young women from white ethnic groups in mind, others, for example people who don’t identify as

women, people who are older or from a different ethnic background may feel the therapy tool is not targeted to them and find it harder to engage with the therapy.

# 8. Decision problem

The key decision questions for this assessment are:

- Does offering digital self-help programmes as a treatment option for disordered eating, binge eating disorder and bulimia have the potential to be clinically and cost-effective use of NHS resources?
- What are the key gaps in the evidence base?

**Table 3: Decision problem**

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| **Populations** | • People with disordered eating who do not need a referral to eating disorder services for further assessment and treatment<br>• People with binge eating disorder or OSFED with similar symptoms, or adults (people aged 18 or over) with bulimia or OSFED with similar symptoms who are referred to specialist eating disorder services, for whom CBT-ED based self-help is considered suitable as the first line treatment<br><br>Where data permits, the following subgroups may be considered:<br>• Children and young people; adults<br>• People who may find it more difficult to use digital self-help technologies (for example people with neurodiverse conditions, learning disability, visual, hearing or cognitive impairment or problems with manual dexterity, or who are less used to using digital technologies in general) |
| **Interventions** | Digital technologies offering NICE-recommended CBT-ED based self-help in a digital format, without healthcare professional support:<br>• Digital CBTe<br>• Overcoming Bulimia Online<br>• Worth Warrior |
| **Comparator** | Usual care |
| **Setting** | Primary care, specialist eating disorder services |

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| **Outcomes (may include but are not limited to)** | Intermediate outcomes:<br>• Time to treatment<br>• Treatment completion rate and reasons for not completing the treatment<br>• Proportion of people that need further treatment or no longer need support<br>• Size and duration of eating disorder treatment waiting list (for any eating disorders)<br><br>Clinical outcomes:<br>• Eating disorder psychopathology (measured for example by Eating Disorder Examination [EDE])<br>• Time to improvement in eating disorder psychopathology<br>• Binge eating episodes<br>• Compensating for binge eating (for example vomiting, using laxatives or diuretics, fasting, excessive exercise)<br>• General functioning (measured for example by Global assessment of functioning [GAF] or Clinical impairment assessment [CIA])<br>• Social, occupational or family functioning<br>• Remission<br>• Relapse<br>• Depression<br>• Anxiety<br>• Weight (although weight may be measured as an outcome in a research study, it is important to note that people with different body size, shape and weight can have an eating disorder)<br>• Bariatric surgery<br>• Dental outcomes<br>• Mortality<br><br>Patient-reported outcomes:<br>• Health-related quality of life (EQ-5D-3L, eating disorder-related quality of life)<br>• Service user acceptability, views, experience and satisfaction<br>• Parent and carer acceptability, views, experience and satisfaction<br><br>Costs and resource use:<br>• Cost of technology<br>• Cost of treatment and management<br>• Cost of training |

| | |
|---|---|
| | • Staff time at different specialisms and levels of pay<br>• Staff cost at different specialisms and levels of pay<br>• Health service use at different settings<br>• Cost of health service use at different settings |
| **Economic analysis** | • A health economic model will be developed where possible, using a cost-comparison or cost utility analysis<br>• Costs will be considered from an NHS and Personal Social Services perspective<br>• Sensitivity and scenario analysis should be done, where possible, to address the relative effect of parameter or structural uncertainty on model results |
| **Time horizon** | The time horizon for estimating potential for clinical and cost effectiveness should be sufficiently long to reflect potential for differences in costs or outcomes between the technologies being compared |
| **Evidence gap analysis** | Evidence gaps in clinical evidence and cost modelling should be identified to help direct further evidence generation |

# 9. Other issues for consideration

## 9.1 Health economic modelling

This assessment covers multiple conditions with different care pathways. To provide information on the potential cost-effectiveness of the technologies for these conditions within one early value assessment, a short-term modelling approach may be needed. Evidence gap analysis could include considerations for longer-term modelling.

NICE eating disorder guideline (NG69) includes decision-tree models to compare the cost effectiveness of guided self-help for binge eating disorder and bulimia with usual care in eating disorder services.

## 9.2 Potential implementation issues

The digital CBT-ED based self-help programmes are designed to work without healthcare professional involvement in the self-help therapy. The technologies are available as smartphone apps, online programmes or both and designed to be used without the need for healthcare facilities (for example at home). So, it is expected that there is only minimal need to adjust current care pathways or service to offer these technologies.

The assessment should collate information from the technology providers on how the digital self-help technologies manage safeguarding concerns and mitigate any potential risks of independent use.

At the end of this assessment, if early use of these technologies is recommended, the committee should consider how any remaining potential risks associated with early use can be best mitigated in clinical practice.

## NICE team

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# Appendix A Related NICE guidance

- Digitally enabled therapies for adults with depression: early value assessment (2023) NICE health technology evaluation HTE8. Last updated 14 January 2025.
- Digital health technologies to help manage symptoms of psychosis and prevent relapse in adults and young people: early value assessment (2024) NICE health technology evaluation HTE17.
- Digitally enabled therapies for adults with anxiety disorders: early value assessment (2023) NICE health technology evaluation HTE9.
- Guided self-help digital cognitive behavioural therapy for children and young people with mild to moderate symptoms of anxiety or low mood: early value assessment (2023) NICE health technology evaluation HTE3.
- Behaviour change: digital and mobile health interventions (2020) NICE guideline NG183.
- Eating disorders: recognition and treatment (2017) NICE guideline NG69. Last updated 16 December 2020.
- Eating disorders (2018) NICE quality standard 175.