



# Resource impact summary report

Resource impact

Published: 8 February 2023

[www.nice.org.uk](https://www.nice.org.uk)

This summary report discusses the potential resource impact associated with self-help digital cognitive behavioural therapy (CBT) technologies. A local resource impact template has also been produced to support resource impact assessment for this early value assessment guidance. This approach is different from our normal resource impact assessment because evidence generation and data collection are needed to establish whether any of the resource benefits given for illustrative purposes below will be realised if using guided self-help digital CBT for children and young people. It is acknowledged the evidence base is limited and the recommendations may change in future. There is also a high level of uncertainty around predicting future mental health needs.

This early value assessment [guidance](#) covers guided self-help digital CBT technologies as an initial treatment for children (aged 5 to 11) and young people (aged 12 to 18) with mild to moderate symptoms of anxiety or low mood.

As this is an early value assessment, the resource impact tools are not directing organisations to assess the cost of full rollout of these technologies. If there is an unmet need, these technologies could be a solution, organisations may therefore wish to identify potential resource impact. Table 1 below shows how the potential eligible population is estimated nationally and for an average size integrated care system (ICS) with a total population of 1.3 million. Percentages can be amended in the local [resource impact template](#).

**Table 1 Eligible population in England and per average size ICS**

-	Percentage %	England population 2023/24	Numbers	Per average size ICS 1.3m population	Numbers
Mild to moderate Anxiety1: Age 5 to 10	5.85	4,242,545	248,000	115,000	7,000
Mild to moderate Anxiety1: Age 11 to 16	11.85	3,998,271	474,000	109,000	13,000
Mild to moderate Anxiety1: Age 17 to 18	19.85	1,219,636	240,000	33,000	6,000
<b>Sub Total</b>	-	<b>9,460,452</b>	<b>962,000</b>	<b>257,000</b>	<b>26,000</b>
Mild to moderate depression (low mood)2: Ages 5 to 10	0.15	4,242,545	6,400	115,000	200

-	Percentage %	England population 2023/24	Numbers	Per average size ICS 1.3m population	Numbers
Mild to moderate depression (low mood)2: Ages 11 to 16	1.2	3,998,271	48,000	109,000	1,300
Mild to moderate depression (low mood)2: Ages 17 to 18	1.95	1,219,636	24,000	33,000	600
<b>Sub Total</b>	-	<b>9,460,452</b>	<b>78,400</b>	<b>257,000</b>	<b>2,100</b>
<b>Total</b>	-	-	<b>1,040,400</b>	-	<b>28,100</b>

1) Anxiety rates increase with age ([Mental Health of Children and Young People Survey 2017](#)). Based on [children and young people mental health survey data](#), and applying a 50% increase from the 2021 [follow up to the 2017 survey](#) data as a proxy. The calculation is shown in the local [resource impact template](#).

2) Using the survey data linked above and applying the same 50% increase to children and young people experiencing depression including symptoms of low mood. These rates exclude major depressive episodes because this is not included in the guidance

Standard care for mild to moderate symptoms of anxiety or low mood is to offer education, advice, support and signposting (without access to healthcare professionals). The availability of effective mental health treatments is limited, leading to long waiting times. Access to treatment can be dependent on symptom severity. The COVID-19 pandemic has intensified the issues related to accessing effective mental health treatments.

Guided self-help digital CBT technologies are an alternative mental health treatment that can provide earlier access to treatment. Some mental health support teams will already be aware of, and using these technologies, however practice is likely to vary across different settings.

Where this approach to helping young people manage their symptoms of mild to moderate anxiety or low mood is adopted, it may require additional resources to implement, which may be significant at local level. Benefits derived from using the technologies may help mitigate additional costs.

Due to a lack of robust data on current practice and other variables such as whether guided self-help digital CBT is an appropriate treatment option, the size of the resource impact will need to be determined at a local level. A local resource impact template has therefore been produced to assist organisations estimate the resource impact.

Depending on current local practice, areas which may impact resources include:

- Software costs of the technologies.
- Capacity to deliver the guided element is needed from NHS clinical psychologists (OSCA) and therapists (LumiNova, OSI, and SilverCloud). The guided element is defined for each of the technologies. Children and young people may continue to have further treatment such as face-to-face CBT, although parallel face-to-face CBT would not be recommended practice for OSCA or OSI.
- Time required for training to support dCBT.
- Using resource use estimates from the [External Assessment Report](#) [EAC] for the guidance, for an average size ICS (total population around 1.3 million), around 28,000 children and young people are potentially eligible for guided self-help digital CBT. If 10% are treated (2,800 people) this would require around 10,000 hours (hrs) of guided support per year or 200 per week (assuming 50 weeks per year).
- Based on minimum and maximum software costs per user/family for the technologies (£30 and £61.35 respectively), as a rough calculation, if 2,800 people received treatment, the technologies could cost between £84k and £172k per average size ICS.
- Other costs such as IT equipment may be needed for those who do not have access to smartphones, tablets, or a computer. This depends on whether these can be provided in schools or by charitable organisations.

Implementing the guidance may have the following benefits:

- Reduced waiting times and improved access to care in a timely manner. Early intervention may reduce the need for more intensive treatment later.
- Improved access to mental health services by offering greater flexibility, more choice and self-management through remote online interventions. Key considerations on the value of guided self-help digital CBT technologies are usability, ability to engage with users and effectiveness when compared with standard care.
- Better health outcomes and care experience.
- Around 1 in 7 people are neurodivergent, this includes people who may find face-to-face contact difficult. For a child or young person in this group, having a guided self-help digital CBT therapy may be more appealing.
- Depending on the dCBT product, children and young people can access therapy sessions from their own private space, for example their home or school. They can also work through the CBT content at their own pace. This benefit may also apply to parents/carers.
- Guided self-help digital CBT could overcome barriers to mental health treatment identified in a recent systematic review by Radez *et al.* ([Reference Radez, Reardon, Creswell, Lawrence, Evdoka-Burton and Waite2020](#)) which included:
  - perceived stigma and embarrassment,
  - difficulties trusting an unknown person,
  - logistical barriers (geographic location, time and convenience, access to transport)
  - financial costs associated with accessing treatment.
  - Children and families may also experience additional difficulties; for example, parents may need to organise childcare for siblings whilst a child accesses treatment.
- There may be some reduction in the requirement for supporting standard care from mental health teams. This can be assessed locally in the template.

The benefits outlined here may also provide some resource benefits to offset some of the potential costs identified above.

#### **Offset required for dCBT to be capacity neutral**

Where effective for improving symptom severity, as some of the [evidence](#) suggests, guided self-help digital CBT could reduce the need for more intensive treatment later. Table 2 below shows crude estimates of the number of children and young people who need to be successfully treated and avoid progression to social anxiety disorder for this topic to be capacity neutral in an average size ICS. Table 2 relates to NHS capacity only because unit prices of the technologies are different, and several variables affect the choice of dCBT option. The impacts can be modelled in the local [resource impact template](#) which can be amended locally:

**Table 2 Point at which dCBT could be capacity neutral in children and young people with symptoms of mild to moderate anxiety (using 10% uptake)**

Eligible population	Numbers (based on worked example for average size ICS)	Average hours of guided support per child receiving dCBT3	Hours requiring offset (by avoiding progression to social anxiety disorder)	Average hours needed per child receiving face- to- face treatment for social anxiety disorder4	Number avoiding progression to social anxiety disorder for topic to be capacity neutral
Aged between 5 and 111	900	2.67	2,400	88	27
Aged between 12 and 182	1,700	4.67	7,900	88	90
<b>Total</b>	<b>2,600</b>	-	<b>10,300</b>	-	<b>117</b>

1 Most dCBT options require 8 sessions of guided support, each session averages 20 minutes. This does not include time required for training.

2 Assumed the older age group all need option with 14 sessions of guided support, each session averages 20 minutes. This is because this age group have increased pressures such as exams.

### 3 [EAC report](#)

4 Each adolescent treated for social anxiety disorder requires, on average, around **88hours** of qualified clinicians' time <https://www.ncbi.nlm.nih.gov/books/NBK568932/>

From the crude estimates above, any benefit achieved above or below the numbers in the last column of table 2 would either increase or decrease the service required.

The above assessment is based on the EAC report for the average time for guided support per child receiving dCBT. The average time needed for face-to-face treatment for adolescent social anxiety disorder is based on the study linked in the table above. This figure may need adjusting when considering face-to-face treatment for preadolescent social anxiety disorder. For simplicity, it is assumed these averages can be applied to treating all adolescent social anxiety disorders.

Mental health services for children and young people are commissioned by integrated care systems. Providers are NHS mental health trusts.

ISBN: 978-1-4731-7762-8