Digital psychological therapy briefing

Deprexis for adults with depression

23 January 2018

Summary

- **The technology** described in this briefing is Deprexis. It is an online programme that uses cognitive behavioural therapy (CBT)-based techniques to treat mild to moderate depression in adults.

- **The scope** for this briefing is to consider the use of Deprexis in a therapist-guided model of care, in adult Improving Access to Psychological Therapies (IAPT) services, for the [NHS England evaluation of digitally enabled psychological therapies for IAPT](https://www.england.nhs.uk/iapt/).

- **The intended place in therapy** would likely be as a step-2 therapy, as an alternative to face-to-face CBT. The user would be supported by a therapist who helps them to work through the programme and gives feedback and guidance.

- **The main points from the evidence** summarised in this briefing are from 3 randomised controlled trials of Deprexis in a therapist-guided model of care including 1,187 adults in Germany and Switzerland. Two studies suggest that Deprexis is more effective than waiting list control (no treatment) or care as is usual in adults with mild to moderate depression. Another study reports that Deprexis as an adjunct to psychotherapy is more effective than psychotherapy alone.

- **Key uncertainties** around the evidence are that there is currently no evidence directly comparing Deprexis in a therapist-guided care model with face-to-face CBT.

- **The cost** of Deprexis in the UK is not yet available but the German-language version can be accessed for around €297.50 (about £270 as at December 2017) per person for 90 days' access (including tax).
resource impact could be increasing access to care by freeing therapist time to treat more people, and providing treatment at a lower cost than face-to-face CBT.

- The IAPT expert panel recommended Deprexis for the evaluation in practice phase of the NICE and NHS England IAPT assessment programme.

The technology

Deprexis (Gaia Group) is an online programme using the principles of CBT, which is designed to treat depression. Deprexis can be used as a standalone self-help tool, but the focus of this briefing is on its use in a therapist-guided model of care.

The content of Deprexis is delivered in 10 modules that explain and provide examples of CBT techniques, and allow the user to practice them. An introductory module asks for the user’s main concerns and preferences, and the modules are presented to the user in a sequence that is tailored to their needs. Users are encouraged to complete all of the modules, although they may experience benefits without completing them all. The modules are:

- psychoeducation
- behavioural activation
- cognitive modification
- mindfulness and acceptance
- interpersonal skills
- relaxation, physical exercise and lifestyle modification
- problem solving
- expressive writing and forgiveness
- positive psychological interventions
- dream work and emotion-focussed interventions.

Each module explains the context or rationale of each therapeutic element and suggests ways that the user can apply that element to their day-to-day life. For example, the problem-solving module explains several concepts such
as defining vague problems in specific terms, generating alternative solutions, choosing 1 option and checking whether this has helped to solve the problem. Specific examples are given and the user can download a worksheet to try out the skills learned.

In each module the user reads information and then selects one of several pre-set responses. The programme selects the subsequent material to match this response, in what is described as a ‘simulated dialogue’ to tailor the content to the user. For example, the users are asked about their perceived reasons for their depression; if the user selects the option that the depression relates to a recent bereavement then this is acknowledged in later modules. The user can also select how much detail they want to read in each module. Each module is expected to take between 10 and 60 minutes to complete, depending on the user’s reading speed and what tailored content is presented. It is intended that the user will do 1 module per week for 10 weeks (Berger et al. 2011).

The programme can be accessed on any device that has internet access. Users log into the programme through an encrypted website, using their own login and password.

Deprexis is mainly text-based but also includes audio content, photographs and drawings. It also includes worksheets and summary sheets. Users can choose whether to get daily motivational messages by email or SMS text message.

**Regulatory status**

Deprexis is CE marked as a class 1 medical device.

**Current usage and reach**

Deprexis is not currently in use in the UK. It is available in Germany, where it is used in a therapist-guided care model in a national integrated care project and in some hospitals, and in Switzerland, where it is provided by some health insurance companies. Deprexis can also be purchased directly from the
website. The technology owner states that more than 10,000 people have used Deprexis to date.

**Current care pathway**

The NHS England [Adult Improving Access to Psychological Therapies (IAPT)](https://www.nhs.uk/conditions/depression-in-adults/) programme aims to provide evidence-based treatments for people with common psychological conditions such as anxiety and depression. IAPT services offer evidence-based psychological therapies given by accredited practitioners, with routine monitoring and regular outcomes focused supervision.

The care pathway for depression is described in NICE guidance on depression in adults, [depression in adults with a chronic physical health problem](https://www.nice.org.uk/guidance/cg251) and [common mental health problems: identification and pathways to care](https://www.nice.org.uk/guidance/cg63). NICE recommends a [stepped-care model](https://www.nice.org.uk/guidance/cg63/chapter/3-Stepped-care-model-introduction) for treating depression, in which the least intrusive, most effective intervention is provided first; if a person does not benefit from the intervention initially offered, or declines an intervention, they should be offered an appropriate intervention from the next step.

Deprexis could be used in a therapist-guided care model in primary care, secondary care, or in IAPT services as a step 2 therapy. It could potentially also be used alongside higher-intensity treatment options in step 3 treatment. Deprexis would be offered as an alternative to other step 2 therapies and it is not anticipated that any changes would be needed to the current care pathway.

**Population, setting and intended user**

Deprexis could be used in any setting where the user has access to the internet, including at home or in outpatient clinics. It would be used by adults with mild to moderate depression, supported by an appropriately trained therapist. In IAPT services this would likely be an appropriately trained psychological wellness practitioner (PWP).
The technology owner states that the user needs no training to use Deprexis and that it needs only basic computer skills to use. There is no formal training in place for therapists, but the company could develop online tutorials or workshops. They have produced a therapist manual for the therapist-guided version of Deprexis.

Deprexis was launched in 2007 in German and the English-language translation was produced in 2009. It has since been translated into Italian, Portuguese, Swedish, French and Spanish. A Greek-language version is expected to be available in early 2018. The user can select the language that they wish to use. This may allow its use in people who do not speak English as a first language, which could include some hard-to-reach populations. In order to use these non-English-language versions of Deprexis in a therapist-guided care model, the therapist may need to speak the same language as the user. This may potentially limit access to non-English-language versions of Deprexis.

**Equality considerations**

NICE is committed to promoting equality, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. In producing guidance and advice, NICE aims to comply fully with all legal obligations to: promote race and disability equality and equality of opportunity between men and women, eliminate unlawful discrimination on grounds of race, disability, age, sex, gender reassignment, marriage and civil partnership, pregnancy and maternity (including women post-delivery), sexual orientation, and religion or belief (these are protected characteristics under the Equality Act 2010).

Digital technologies such as Deprexis may be unsuitable for people with visual impairment or learning disability. Disability is a protected characteristic under the Equality Act.
The content

**Care model**

Deprexis exists in 2 forms: a standalone self-help programme; and a therapist-guided programme, which is being used in an ongoing clinical trial. The standalone self-help programme is beyond the remit of this programme.

In the therapist-guided version of Deprexis, the therapist and user can send and receive messages through a secure messaging system within the Deprexis programme. In addition, the therapist sends weekly secure messages giving feedback on the user’s progress through the programme. These messages do not refer to specific responses given by the user in the modules, but recognise the user’s progress and encourage the user to engage with the programme. The therapist can review the user’s mood as recorded by the ‘mood check’ and PHQ-9 scores. If the user does not engage with the programme, the therapist offers help and support. They can also see when the user last used the programme, how much time they have spent on it, how many days they have been active, activity during the last week, and which modules they have completed so far.

**Outcome measures**

Deprexis uses the PHQ-9 outcome measure, which users are encouraged to complete roughly every 2 weeks. PHQ-9 is an outcome measure that is routinely used for outcome reporting in IAPT services. In addition there is a daily, 6-item mood questionnaire called the ‘mood check’. In order to be used in IAPT services, Deprexis would need to add the GAD-7 outcome measure in addition to PHQ-9.

**Content assessment**

The therapeutic content of Deprexis was assessed using a framework designed to measure how closely its content maps to the standard principles of CBT for depression (Beck model).
The content assessors reported that Deprexis is well written and constructed and is consistent with a framework for CBT for treating depression. However, they noted that it is not directly equivalent to face-to-face CBT as it is less tailored to each individual user and so is less nuanced.

The technology owners provided the assessors with access to the therapist-guided version of Deprexis. The assessors regarded the level of therapist guidance and risk flagging to be adequate.

The assessors noted the following points regarding Deprexis:

- There is some tailoring of content to the user’s needs, however this is limited. In order to progress through the programme, users must choose from a list of pre-determined options that may not precisely fit their own feelings.
- Users are encouraged to take breaks while using the programme, which may help with tiredness and poor concentration.
- The modules on positive psychology, dream analysis and Gestalt are off-model, meaning that they are not usually part of the CBT model, and so their mutative value is unclear.

The assessors evaluated the therapist manual for the therapist-guided version of Deprexis and found it to be comprehensive and thorough, containing sensible advice to therapists. The advice allows therapists to respond appropriately to people whose depression is responding well to treatment, and to those in whom it is not.

The following issues were noted with the manual:

- While it did suitably address how to respond to risk of suicidality, it does not include advice on responding to self-harm.
- It would need to be adapted to reflect the local protocols for dealing with risk.
- It would benefit from clarity around its instructions for responding to messages from the user. It advises that therapists should wait at least 1
day to respond, or to reply quicker in an emergency, but does not define what would count as an emergency.

**Scalability**

The technology developer has stated that Deprexis is designed to be scalable to meet increased use, and systems are in place to cope with very high demand.

**Technical standards**

**Technical assessment**

Deprexis has undergone a technical evaluation using sections of the NHS Health Developer Network [Digital Assessment Questions (DAQ)](https://digital.nhs.uk), a pilot tool currently available to developers in beta form. The evaluation included 5 domains of the DAQ: privacy and confidentiality, security, usability and accessibility, interoperability and technical stability.

Deprexis met the digital standards set out in the DAQ after remediation plans were provided by the technology owner, to address issues identified in the domains of usability and accessibility, and interoperability.

**Clinical evidence**

A literature search was carried out for this briefing in accordance with the IAB process and methods statement. This briefing includes the most relevant or best available published evidence relating to the clinical effectiveness of the technology.

This briefing summarises 3 studies, involving a total of 1,187 patients. These are both randomised controlled trials (RCTs) in which Deprexis was used in a therapist-guided care model (described as ‘guided use of Deprexis’ in these studies). Table 1 summarises the clinical evidence as well as its strengths and limitations.
Overall assessment of the evidence

The RCTs using Deprexis in a therapist-guided care model were set in Germany and Switzerland. The outcome measures used to assess clinical effectiveness were relevant to the NHS.

All 3 studies were well designed, although the Berger et al. (2011) study was fairly small and was powered to detect moderate but not small differences between the groups.

Both studies relied largely on recruitment of people from internet forums. Therefore the people taking part in these studies probably had good IT literacy and were engaged in managing their own healthcare. This could mean that the people in these trials might not be representative of the whole population eligible to use Deprexis in the NHS.

The RCT by Berger et al. (2017) compares Deprexis and psychotherapy, with psychotherapy alone. This is the only RCT comparing Deprexis with face-to-face therapy. However, the use of Deprexis with psychotherapy is not representative of the care model that would be used in the NHS and so its generalisability to the NHS is limited. An ideal study would compare use of Deprexis in a therapist-guided care model with face-to-face CBT, reporting outcome measures that measure depression symptoms, but this evidence is not currently available.
## Table 1 Summary of evidence

<table>
<thead>
<tr>
<th><strong>Berger et al. 2011</strong></th>
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<tbody>
<tr>
<td><strong>Study design, size and location</strong></td>
<td>RCT, 76 people randomised. Germany and Switzerland (online recruitment).</td>
</tr>
<tr>
<td><strong>Intervention and comparator(s)</strong></td>
<td>10 weeks’ access to Deprexis as unguided self-help without clinician support (n=25); Deprexis as guided self-help (users had weekly emails from a therapist and could contact the therapist freely by email n=25); waiting list control (no treatment and then delayed access to unguided Deprexis n=26).</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>Adults with a total score of more than 13 on the BDI-II and a score below 2 on the suicide item of BDI, not participating in any other psychological studies. If using prescribed medication for depression or anxiety then dose must have been constant for 1 month before study and remain constant throughout. Assessed to have major depression or dysthymia using Mini-DIPS.</td>
</tr>
<tr>
<td><strong>Key outcomes</strong></td>
<td><strong>Primary outcomes:</strong> Depression symptoms were similarly improved in people having guided or unguided Deprexis. The guided group had a larger improvement but this was not statistically significant.</td>
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<td></td>
<td>Waiting list control group mean BDI-II (SD): pre-treatment 29.8 (8.6), post-treatment 28.5 (9.4), 6-month follow-up (after delayed treatment) 21.08 (9.9).</td>
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<tr>
<td></td>
<td>Deprexis unguided mean BDI-II (SD): pre-treatment 29.8 (8.6), post-treatment 20.8 (13.5), 6-month follow-up 19.4 (12.9).</td>
</tr>
<tr>
<td></td>
<td>Deprexis guided mean BDI-II (SD): pre-treatment 28.8 (8.2), post-treatment 17.3 (10.2), 6-month follow-up 16.24 (11.4).</td>
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<td></td>
<td>At post-treatment the within-group effect sizes for BDI-II were d=0.8 for unguided self-help (large effect size) and d=1.24 for guided self-help (very large effect size).</td>
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<td></td>
<td>The between-group effect size of the change in BDI-II scores at post-treatment was d=-0.3 for unguided vs guided self-help (small effect size); d=0.66 for unguided vs control; and d=1.14 for guided vs control.</td>
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<td></td>
<td>Improvements in BDI-II seen in the Deprexis groups were maintained at 6-month follow-up.</td>
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<td><strong>Secondary outcomes:</strong></td>
<td></td>
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</table>
Secondary outcomes (quality of life) had greater improvement in the guided than unguided Deprexis group.

BSI, IIP, WHOQOL-BREF were significantly improved in the guided Deprexis group compared with waiting list control. Only the BSI score was significantly improved in unguided Deprexis compared with waiting list control. The improvements seen in these measures in the unguided Deprexis were not significant compared with guided Deprexis.

Strengths and limitations
While small, this study was well designed, used validated patient outcome measures and appropriate statistical methods. Drop-out rates were 9% at post-treatment and 22% at follow-up.

The enrolment into the study involved a telephone conversation and diagnosis, and so this may not be truly representative of ‘unguided’ self-help for the control group. Assessors were not blinded to the intervention.

Declarations of interest
None.

Klein et al. 2016

Study design, size and location
Assessor-blinded randomised controlled trial, 1,013 people randomised.
Multiple sites in Germany (recruitment included in clinics and through online forums).

Intervention and comparator(s)
Care as usual (n=504) or care as usual plus 12 weeks’ access to Deprexis (n=509).

Of the Deprexis + CAU group, people with PHQ-9 score of 5–9 (‘mildly depressed’, n=201) were given unguided access to the programme and people with PHQ-9 score 10–14 (‘moderately depressed’, n=308) guided were given guided access.

Care as usual was not determined by the investigators and included any form of treatment including anti-depressants and psychotherapy.

Population
Adults aged 18–65 with a self-reported PHQ-9 score of 5–14.

Key outcomes
**Primary outcome:**
People who used Deprexis had a statistically significant improvement in depression symptoms compared with people having CAU. The between-group effect sizes show that guided and unguided Deprexis had similar-sized effects on depression symptoms.

People with moderate depression having guided Deprexis, had a bigger improvement in their depression symptoms (3.66 points on PHQ-9 scale) compared with CAU in the same patient group (1.87 points).

People with mild depression having unguided Deprexis had a bigger improvement in the depression symptoms (1.09) compared with CAU in the same patient group (0.02).
The between-group effect size of unguided Deprexis in mildly depressed people (at post-treatment, compared with CAU) was 0.31 (small to medium).

The between-group effect size of guided Deprexis in moderately depressed people (at post-treatment, compared with CAU) was 0.44 (small to medium).

Overall the within-group effect size between baseline and post-treatment was d=0.34 (small to medium) for the CAU group and d=0.81 (large) for the Deprexis groups combined.

At post-assessment, 33% in the CAU group and 21% of people in the Deprexis groups had worsened PHQ-9 scores.

CAU 'mildly depressed' group - mean PHQ-9 (SD):
Pre-treatment 7.70 (1.25); post-treatment 7.68 (3.79); follow-up 7.28 (4.17).

CAU 'moderately depressed' group - mean PHQ-9 (SD):
Pre-treatment 11.89 (1.31); post-treatment 10.02 (4.35); follow-up 9.52 (4.34).

Deprexis unguided + CAU 'mildly depressed' group - mean PHQ-9 (SD):
Pre-treatment 7.62 (1.19); post-treatment 6.53 (3.59); follow-up 6.08 (3.86).

Deprexis guided + CAU 'moderately depressed' group - mean PHQ-9 (SD):
Pre-treatment 11.81 (1.4); post-treatment 8.15 (4.17); follow-up 8.05 (4.2).

**Secondary outcomes:**
Both the CAU and Deprexis + CAU groups showed improvements in HDRS-24, QIDS-C16, SF-12 mental health and FEP-2. The Deprexis +CAU showed larger improvements than CAU, with small to medium effect sizes. No improvement was seen in SF-12 physical health in either group.

**Strengths and limitations**
Study was well designed, used validated patient outcome measures and appropriate statistical methods. Some of the secondary outcome measures were clinician-rated rather than self-assessed and so results may be more objective. The study was adequately powered to detect differences between the 2 main treatment groups.

Limited reporting of outcomes of guided vs unguided Deprexis groups. The participants in these 2 groups had different baseline characteristics (severity of depression) and so it is difficult to make direct comparisons between these groups. Drop-out rates were around 22% at completion and 25% at follow-up.

**Declarations of interest**
One of the authors of this study is employed as research director by the technology owner, Gaia.
### **Berger et al. 2017**

<table>
<thead>
<tr>
<th>Study design, size and location</th>
<th>RCT, n=98 people randomised. Germany.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention and comparator(s)</td>
<td>Deprexis as an adjunct to face-to-face psychotherapy; or face-to-face psychotherapy alone.</td>
</tr>
<tr>
<td>Population</td>
<td>Adults who self-referred for psychotherapy, with BDI-II score of over 13, and unipolar depression.</td>
</tr>
</tbody>
</table>
| **Key outcomes**              | **Primary outcome:**  
At 12 weeks, people who had Deprexis plus psychotherapy had statistically significantly greater improvements in their depression symptoms than people having psychotherapy alone.  
At 6 months, people who had Deprexis plus psychotherapy continued to have improved depression scores than the Deprexis alone group.  
  
Psychotherapy alone group mean BDI-II scores (SD):  
Baseline 30.2 (11.2); 12 weeks 25.6 (12.2); 6 months 22.0 (15.0).  
Deprexis plus psychotherapy group mean BDI-II scores (SD):  
Baseline 29.6 (8.4); 12 weeks 19.9 (12.3); 6 months 18.1 (12.3).  
Effect size between the 2 groups at 12 weeks d=0.51 (medium effect size).  
There was no statistically significant difference between the 2 groups in the proportions of people who had a clinically significant improvement in depression symptoms, or in the number of people whose symptoms deteriorated.  
**Secondary outcomes:**  
The Deprexis plus psychotherapy group had improved scores of the mental health scale of SF-12 and PHQ-15 compared with the psychotherapy alone group. No differences was seen between groups for GAD-7 or the physical subscale of SF-12. |
| Strengths and limitations      | The study aimed to recruit 800 people to detect an effect size of d=0.2 at 12 weeks. Post-hoc analysis showed that the study was adequately powered to detect an effect size of d=0.5 at 12 weeks. Drop-out rates were around 30% at 12 weeks and 55% at 6-month follow-up. |
| Declarations of interest       | One of the authors of this study is employed by the technology owner, Gaia. |
**Abbreviations**: BDI, Beck depression inventory; BDI-II, Beck depression inventory 2; BSI, brief symptom inventory; CAU, care as usual; FEP-2, questionnaire for the evaluation of psychotherapeutic progress; GAD-7, generalised anxiety disorder scale; HDRS-24, clinician-rated assessment of severity of depression using Hamilton depression rating scale; IIP, inventory of interpersonal problems; MiniDPS, mini diagnostic interview for psychiatric disorders; PHQ-15, patient health questionnaire somatic symptoms module; QIDS-C16, clinician-rated quick inventory of depressive symptomology; SF-12, short form health survey; SD, standard deviation; WHOQOL-BREF, World Health Organization abbreviated generic quality of life instrument.

**Recently completed and ongoing studies**

One recent trial on Deprexis for people with depression was identified in the preparation of this briefing. This was listed on public trials registries:

- [NCT01731717](https://clinicaltrials.gov/ct2/show/NCT01731717) Cluster Randomized Trial of Stepped Care Intervention vs. Treatment as Usual for Patients With Depression (SCM). Completed.
Cost and resource impact

There are currently no fully published economic analyses available for Deprexis. An economic analysis was conducted as part of the trial reported by Klein et al. (2016) but this has not been published yet.

A preliminary analysis of a German health economic RCT have been reported by the health insurance company, DAK. In this study, people were randomised to receive either Deprexis (as a standalone self-help) or general information about where to find help for depression. The analysis reported that in the ‘information’ group, total health costs reduced by around €585 (£530) per person in the study year, compared with the previous year while the Deprexis group’s costs reduced by around €1,070 (£970) per person.

A health economic evaluation published as an abstract (Gräfe et al. 2017) investigated the potential for Deprexis to reduce healthcare costs, compared with care as usual. A total of 3,086 people in Germany with mild to moderate depression were randomised to receive Deprexis or care as usual. Total costs of statutory health insurance decreased by 13% in the care as usual group and by 32% in the Deprexis group.

Technology costs

Deprexis is not yet in use in the UK and the costs and price structures are not yet defined. The technology owner has stated that they are expected to be in line with other computerised CBT technologies and based on licence fees.

In Germany, Deprexis is available direct to the consumer (as standalone self-help) for a licence fee of around £270 (€297.50; including tax). The licence lasts 90 days. Including at total of 1 hour of a PWP’s time, the total cost will be £290 per person.
**Resource impact compared with standard care**

**Table 2 Costs of Deprexis compared with current treatments for depression**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Per treatment per person</th>
<th>Existing cost</th>
<th>Cost using Deprexis</th>
<th>Cost/saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided self-help (3 to 6 sessions)</td>
<td>£59</td>
<td>£290</td>
<td>£231 cost incurring</td>
<td></td>
</tr>
<tr>
<td>Group based CBT</td>
<td>£97</td>
<td>£290</td>
<td>£193 cost incurring</td>
<td></td>
</tr>
<tr>
<td>Workshop-based CBT</td>
<td>£8</td>
<td>£290</td>
<td>£282 cost incurring</td>
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<tr>
<td>Face-to-face individual CBT</td>
<td>£560</td>
<td>£290</td>
<td>£270 cost saving</td>
<td></td>
</tr>
<tr>
<td>Antidepressant medication for 6 months (weighted average cost based on minimum daily dose)</td>
<td>£110</td>
<td>£290</td>
<td>£180 cost saving</td>
<td></td>
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</tbody>
</table>

The following costing assumptions have been made for Deprexis:

- The license is expected to cost around £270 (including appropriate tax) per person per 90 days.
- There is no cost for training.
- It may be delivered using a lower grade of staff (PWP).
- The technology owner estimates that the therapist will spend 2 to 5 minutes on average per consultation to discuss the user’s progress. A total of 1 hour of PWP time has been included in the cost of Deprexis.

**Overall impact**

The use of the new technology is unlikely to deliver cash savings but it may free staff time to work with people who need more support. For example a reduction in face-to-face CBT is expected to release therapist time.

**Cost and resource impact statement from the developer**

The technology owner states that cost savings could be incurred with Deprexis, as less clinician time is needed to deliver treatment using Deprexis, compared with face-to-face CBT.
IAPT expert panel considerations

The expert panel considered the assessments of therapeutic content, digital technological factors, clinical evidence and resource impact in making their decision that Deprexis should progress to the evaluation-in-practice phase of this programme once the remediation plans provided following the technical assessment have been implemented.

The panel concluded that the technology owner meets the eligibility criteria to apply for development funding from NHS England.

Technical assessment

The panel noted that there are some areas where Deprexis does not currently meet the required standards and that the remediation plans provided by Deprexis, in the domains of usability and accessibility, and interoperability, were acceptable to the technical assessors. The panel requested that the technology owner implement these plans and self-certify to NICE when the necessary remediation work has been completed, in order to progress to the evaluation in practice phase.

Content assessment

The panel discussed the content assessment and agreed with the assessors’ conclusion that overall Deprexis is well written and constructed and consistent with a framework for CBT to treat depression.

The panel noted that the programme uses the PHQ-9 outcome measure and heard that the technology owner has agreed to include the GAD-7 outcome measure which needs to be added for use in IAPT services.

The panel noted that the therapist manual would need to be adapted to reflect the local IAPT service protocols, or to instruct therapists to refer to local protocols for dealing with risk.
Clinical evidence

The panel considered the main points from the evidence from 3 RCTs of Deprexis in a therapist-guided model of care including a total of 1,187 adults in Germany and Switzerland. Two studies suggest that Deprexis is more effective than waiting list control (no treatment) or care as usual in adults with mild-moderate depression. Another study reports that Deprexis as an adjunct to psychotherapy is more effective than psychotherapy alone.

Cost and resource impact

The German-language version of Deprexis can be downloaded for around £270 (€297.50) per person for 90 days’ access (including appropriate tax). The panel agreed that Deprexis is unlikely to deliver cash-releasing savings but a potential resource impact could be to increase access to care by freeing therapist time to treat more people, at a lower cost than face-to-face CBT.

The panel noted that Deprexis is not yet in use in the UK, and that the assessment of cost effectiveness may change if the cost of the technology differs from the current German-language version.

Development of this briefing

This briefing was developed by NICE for NHS England’s assessment of digitally enabled psychological therapies for IAPT. The briefing was presented to NICE’s IAPT expert panel, who considered Deprexis for this assessment programme. The process and methods statement sets out the process for selecting topics, and how the briefings are developed, quality-assured and approved for publication.

Panel members

- Professor Tim Kendall, national clinical director for Mental Health, NHS England and NHS Improvement
- Professor Steve Pilling, professor of clinical psychology and clinical effectiveness, University College London

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