NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE
IAPT assessment briefing
Space from Depression for adults with depression

9 February 2018

Summary

- The technology described in this briefing is Space from Depression. It is an online programme designed to treat depression.
- The scope for this briefing is to consider the use of Space from Depression in a model of care where a therapist supports the user, in adult IAPT services, for the NHS England evaluation of digitally enabled psychological therapies for IAPT.
- The intended place in therapy would likely be as a step 2 therapy, as an alternative to face-to-face cognitive behavioural therapy (CBT) for people with depression. It would be delivered with support and guidance from a therapist.
- The main points from the evidence summarised in this briefing are from 1 randomised controlled trial including a total of 188 adults in Ireland. The trial shows that Space from Depression is more effective than waiting list control (that is, no treatment) in adults with depression.
- Key uncertainties around the evidence are that there is currently no evidence comparing Space from Depression with standard care options such as face-to-face CBT.
- The cost of Space from Depression varies according to the number of licences bought, but is typically around £24 per person for 1 year's access (at 0% VAT), with each IAPT service being charged an additional £500 to £2,000 for therapist training. The resource impact would be less than face-to-face CBT, group CBT or drug treatment, and slightly more than workshop-based CBT.
- The IAPT expert panel recommended Space from Depression for the evaluation in practice phase of the NICE and NHS England IAPT assessment programme.

The technology
Space from Depression is an online cognitive behavioural therapy (CBT) programme for adults with depression and anxiety symptoms. It aims to teach users skills and
strategies to manage depression. The programme comprises 7 modules that each contain quizzes, videos, information, personal stories, interactive activities, homework suggestions and summaries:

- Module 1 – Getting started: an introduction to CBT and the emotional, cognitive and behavioural aspects of depression.
- Module 2 – Understanding feelings: learning to understand the emotions, mood and physical reaction to depression and the impact of lifestyle choices on mood.
- Module 3 – Spotting thoughts: noting and tracking thoughts, exploring the connection between cognitions and mood and recording these graphically.
- Module 4 – Boosting behaviour: addressing inactivity and lack of motivation.
- Module 5 – Challenging thoughts: supporting users to challenge distorted or overly negative thinking patterns, thought records, helpful coping thoughts.
- Module 6 – Core beliefs: investigating the role that deeply held core beliefs could have on mood and depression.
- Module 7 – Bringing it all together: bringing together the skills learnt so far, noting the user’s personal warning signs, making a plan for staying well.

Users are encouraged to do 1 module per week. It takes about 1 hour to complete each module. Space from Depression can be accessed through the internet on desktop computers, tablets and smartphones.

**Regulatory status**
The technology owner has stated that Space from Depression is not currently within remit for any UK regulation.

**Current usage and reach**
Space from Depression is currently used in 85 IAPT services and clinical commissioning groups.

**Current care pathway**
The NHS England *Adult Improving Access to Psychological Therapies (IAPT)* 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 the NICE guideline on depression in adults, depression in adults with a chronic physical health problem and common mental health problems. NICE recommends a stepped-care model for treating depression, in which the least intrusive, most effective intervention is provided first.

Space from Depression could be used in primary care, secondary care or in IAPT services as a step 2 therapy. It could potentially also be used alongside higher-intensity options as a step 3 treatment. It is not anticipated that any changes would be needed to the care pathway.

**Population, setting and intended user**

Space from Depression could be used in any setting in which the user has access to the internet, including in the home or in outpatient clinics. It would be used by adults with mild to moderate depression, in a therapist-guided care model with an appropriately trained therapist. In IAPT services this would likely be an appropriately trained psychological wellness practitioner (PWP).

The technology owner has stated that no training is needed for users of Space from Depression. The technology owner provides training to therapists in services that offer the programme, at an additional cost to the licence fee. Training can range from short online sessions to a full day of onsite training. Training includes:

- an introduction to computerised CBT (cCBT)
- how to assess suitability for cCBT, introduce people to cCBT and keep them engaged
- how to support patients to get the most out of cCBT
- introducing and supporting Space from Depression.

**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).

The technology owner states that Space from Depression has been designed to be suitable for people with low literacy levels and this may improve accessibility.

Digital technologies such as Space from Depression may be unsuitable for people with visual impairment or learning disabilities. Disability is a protected characteristic under the Equality Act.

**The content**

**Care model**

The user logs into the client activity page to work through the modules of the programme, and their therapist can log in to a clinician dashboard to view their progress. The clinician dashboard includes a client list, date of review, results of PHQ-9, GAD-7 and other questionnaires over time, and the ability to review any work that the user has done.

The therapist and user can communicate through a secure messaging function built into Space from Depression. If the therapist and user agree a set day of the week to review work, a reminder will appear on the user’s screen to say when their message will be read by the therapist. A live-chat function can be made available if synchronous communication is needed.

The therapist can unlock additional features from the client’s activity page as needed. These include modules on sleep, anger management, self-esteem and employment support.

The technology owner anticipates that therapists will spend 10 to 15 minutes per user per week in reviewing work and sending messages.

**Outcome measures**

Space from Depression uses the PHQ-9 and GAD-7 outcome measures that are needed for use in IAPT services.
Content assessment

The therapeutic content of Space from Depression was assessed using a framework designed to measure how closely its content maps to the standard principles of CBT for depression.

The content assessors reported that Space from Depression is consistent with a framework for CBT to treat depression. At the start of the programme there is a helpful agreement that sets out the expectations of the user and the therapist, and the pace of the programme was judged to be right. The assessors considered that by the end of the course, the user would be familiar with the therapy model and able to put it into practice.

The assessors noted the following points regarding Space from Depression:

- The language used is largely accessible, although in a few places the wording could be clearer (for example ‘changes’ would be clearer than ‘fluctuates’).
- The ‘personal stories’ are very useful, because some of the characters show the negative expectations that some users may have of using the programme.
- Sensible advice is included for anyone experiencing suicidal thoughts, directing the user to contact their GP, NHS Direct or the Samaritans or to talk to the therapist.
- There is useful information about the risk of self-harm and some links to support. The programme also includes a list of suggested distractions the user could put into practice to prevent self-harming. The assessors questioned whether this list was evidence-based, and if this was useful. They also suggested that the list may be better located elsewhere in the programme.
- The assessors noted that sleep and medication are both included as ‘lifestyle choices’, which may be confusing and unhelpful.

The assessors evaluated the therapist manual for Space from Depression. They noted this has some helpful guidance, particularly about the expected frequency of contact during treatment. The manual includes useful guidance for supporting a user who is in recovery, but there is less information on how to identify and support people who are not in recovery. This includes people not responding to treatment and people at risk of deterioration, suicide and self-harm.
The following issues were noted with the manual:

- It does not include advice on how to manage urgent situations.
- It identifies that there will be boundaries to the therapist’s role but does not explain how these should work, what the limits should be or how these should be managed.

**Scalability**
The technology owner has stated that any additional increase in users from the NHS following evaluation through this programme could be managed within current capacity.

**Technical standards**

**Technical assessment**
Space from Depression has undergone a technical evaluation using sections of the Digital Assessment Questions (DAQ), 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.

Space from Depression met the digital standards set out in the DAQ. The technology assessors noted that Space from Depression and its technology owner appear to be relatively well aligned with NHS standards, with some areas for development.

**Clinical evidence**
A literature search was carried out for this briefing in accordance with the 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 1 randomised control trial including a total of 183 patients. Table 1 summarises the clinical evidence as well as its strengths and limitations.

**Overall assessment of the evidence**
Richards et al. (2015) used Space from Depression in a therapist-supported care model, which is likely to be representative of how it would be used in IAPT services. However, the trial compared the programme with waiting list control (no treatment)
rather than with standard care. Studies comparing the programme with another active intervention, such as face-to-face CBT, would be more informative than comparisons with waiting list control.

Tables 1 shows the summary of evidence from the study.

Table 1 Richards et al. 2015

<table>
<thead>
<tr>
<th>Study size, design and location</th>
<th>Randomised controlled trial, n=188 Ireland</th>
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<tbody>
<tr>
<td>Population</td>
<td>Adults who used a mental health charity (Aware), BDI-II score 14-29 (mild to moderate depression).</td>
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<td>Intervention and comparator(s)</td>
<td>People were randomised to either:</td>
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<td>• Access to Space from Depression with weekly feedback from a trained Aware volunteer ‘supporter’. The supporter monitored the user’s progress through a dashboard interface and provided asynchronous feedback taking about 10-15 minutes per week.</td>
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<td></td>
<td>Or:</td>
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<td></td>
<td>• Waiting list control, comprising no treatment for 8 weeks and then supported access to Space from Depression as described above.</td>
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<tr>
<td>Key outcomes</td>
<td>The primary outcome measure was depression symptoms measured using the BDI-II. People having Space from Depression had a statistically significant improvement in BDI-II score compared with waiting list control.</td>
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<td>Clinically reliable changes were defined as a change of 9 points or greater on the BDI-II scale. 29.2% (n=28) of people in the Space from Depression group achieved this change, compared with 7.6% (n=7) in the waiting list group. This change was statistically significant (p=0.000).</td>
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<td>Space from Depression group mean BDI-II (SD): baseline 20.90 (3.83); 8 weeks (post-treatment) 15.67 (7.68); 3-month follow-up 11.86 (6.9); 6-month follow-up 14.91 (5.44).</td>
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<td></td>
<td>Waiting list control group mean BDI-II (SD): baseline 20.84 (4.17); 8 weeks 20.43 (6.97).</td>
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<td>Secondary outcome measures were GAD-7 and WSAS. Statistically significant improvements in GAD-7 and WSAS scores were seen in the Space from Depression group compared with waiting list control.</td>
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<td>Strengths and limitations</td>
<td>12% of people randomised to Space from Depression did not start module 1, and 62% did not complete all 7 modules.</td>
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Post-treatment response data was available for 60% of the Space from Depression group: 3-month follow-up data were returned by 52% and 6-month follow-up data were returned by 30%. The study was adequately powered.

Declarations of interest
The first author of this study is employed by the technology owner.

Abbreviations: BDI-II, Beck depression inventory-2; GAD-7, generalised anxiety disorder scale; WSAS, work and social adjustment scale.

Recently completed and ongoing studies
Several recent, ongoing or in-development trials on the use of Space from Depression for people with depression were identified in the preparation of this briefing. All of these were listed on ClinicalTrials.gov:

- **NCT03062202**: Internet-delivered Cognitive Behaviour Therapy at Step 3 of IAPT (ICBT@STEP3); non-randomised trial set in UK, expected completion September 2017.
- **NCT03188575**: Effectiveness & Cost-effectiveness of Internet-delivered Interventions for Depression and Anxiety Disorders in IAPT (D-IAPT); randomised controlled trial set in UK, expected completion July 2018.
- **NCT03062215**: Efficacy of a Culturally Adapted Cognitive Behavioural Internet-delivered Treatment for Depression (CAiCBT); randomised controlled trial set in Columbia; expected completion March 2018.
- **NCT03068676**: Internet-delivered Treatments for Depression and Anxiety in Primary Care (SUMMA); non-randomised study set in the US; Expected completion date unclear.
- **NCT03271645**: Internet-delivered Interventions for Stress, Anxiety and Depression in the Workplace (iCBT@Work); non-randomised study comparing Space from Depression, Space from Anxiety and Space from Stress with face-to-face counselling; set in a workplace in Ireland; expected completion date unclear.
- **NCT02614443**: Effectiveness and Acceptability of Internet-delivered Treatment for Depression, Anxiety and Stress (EAITDAS); non-randomised study set in the US; expected completion September 2017.
Cost and resource impact

Technology costs
The cost of Space from Depression ranges from £16 to £73 per licence, depending on the number of licences purchased. An average IAPT service would pay around £24 per licence (at 0% VAT), which gives 1 user access to the programme for 1 year.

In addition to the cost of the technology, the technology owner estimates that around 90 minutes of PWP time would be needed for each course of treatment. This is estimated to cost an additional £29, bringing the total cost per patient to an average IAPT service to £53. In addition, the technology owner charges extra for training: this ranges from £500 for an online 2-hour session for up to 25 attendees to £2,000 for a full day of onsite training.

Resource impact compared with standard care
Table 2 Costs per treatment per person of Space from Depression compared with current treatments for depression

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Existing cost</th>
<th>Cost using Space from Depression</th>
<th>Difference</th>
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<tbody>
<tr>
<td>Guided self-help (3 to 6 sessions)</td>
<td>£59</td>
<td>£53</td>
<td>£6, cost saving</td>
</tr>
<tr>
<td>Group CBT</td>
<td>£97</td>
<td>£53</td>
<td>£44, cost saving</td>
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<tr>
<td>Workshop CBT</td>
<td>£8</td>
<td>£53</td>
<td>£45, cost incurring</td>
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<tr>
<td>Face-to-face, individual CBT</td>
<td>£560</td>
<td>£53</td>
<td>£507, cost saving</td>
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<tr>
<td>Antidepressant medication for 6 months (weighted average cost based on minimum daily dose)</td>
<td>£110</td>
<td>£53</td>
<td>£57, cost saving</td>
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</tbody>
</table>

Table 2 shows direct staff costs and licence fees only, indirect and overhead costs have not been included.

The following costing assumptions have been made for Space from Depression:

- The Space from Depression user subscription is expected to cost around £24 per person (at 0% VAT).
• Space from Depression would be delivered by a PWP (AFC band 5); costs include 90 minutes of their time (costing £29) per person.

The cost for training is additional to these costs, and ranges from £500 to £2,000 per IAPT service.

**Overall impact**
Using Space from Depression is unlikely to save costs directly but it may free staff time, which could in turn reduce waiting times and increase access to care. For example, a reduction in face-to-face CBT would release therapist time.

**Cost and resource impact statement from the technology owner**
The technology owner has stated that using Space from Depression can reduce overall care costs for step 2 treatment of depression by two thirds, while providing better patient outcomes than standard care.

**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 Space from Depression should progress to the evaluation in practice phase of this programme.

The panel found that Space from Depression did not meet the eligibility criteria to apply for [NHS England development funding.](#)

**Technical assessment**
The panel noted the technical assessment and the technical assessors’ conclusion that the digital technical standards achieved by Space from Depression were acceptable. The panel noted that the DAQ scores in the initial assessment of Space for Depression were acceptable in all but the section assessing interoperability, and the technology owner provided clarifications that raised the score to a sufficient level. The panel noted that the technology owner was already working to address an issue relating to the accessibility scores of Space from Depression.

The panel requested clarification on which systems Space from Depression can interoperate with, and whether SilverCloud has any plans to seek additional APIs with other patient care systems in the future.
Content assessment
The panel discussed the content assessment and agreed with the assessors’ conclusion that overall Space from Depression is consistent with a framework for CBT to treat depression. They noted the programme contains useful content advice and that the assessors judged it to be well paced for the user.

The panel noted the assessors’ conclusions that although the therapists’ manual contains some helpful guidance, it could be improved with advice on how to manage urgent situations and how the boundaries to the therapist’s role should be managed.

The panel noted that PWPs are not trained to deliver core belief interventions, which are the focus of module 6 of Space from Depression. The panel requested that the evaluation in practice phase should monitor the use of this module and seek feedback from IAPT services on what level of training is needed to deliver it.

Clinical evidence
The panel considered the main points from the evidence from 1 randomised controlled trial including a total of 188 adults in Ireland. The trial shows that Space from Depression is more effective than waiting list control in adults with depression.

Cost and resource impact
The panel heard that the cost of Space from Depression varies according to the number of licences bought and is typically around £24 per person for 1 year’s access (at 0% VAT), with each IAPT service being charged an additional £500 to £2,000 for therapist training. They noted the conclusion that Space from Depression is unlikely to deliver cash releasing savings but may free therapist time, allowing more people to be treated, and the resource impact would be less than face-to-face CBT or antidepressant treatment, and slightly more than workshop-based CBT.

The panel noted that Space from Depression is widely used in IAPT services.

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 (chair), national clinical director for mental health, NHS England and NHS Improvement.
- Ms Lauren Aylott, lay member.
- Professor Peter Bower, professor of health services research, Manchester University.
- Professor Chris Hollis, professor of child and adolescent psychiatry, University of Nottingham.
- Dr Ifigeneia Mavranezouli, senior health economist, University College London.
- Dr Nicholas McNulty, primary care psychologist, South London & Maudsley NHS Trust.
- Dr Georgina Ruddle, Acting Associate Director Mental Health, Maternity and Children, and Interim Transforming Care Partnerships Lead, NHS Wiltshire Clinical Commissioning Group, NHS Wiltshire Clinical Commissioning Group
- Professor Steve Pilling, professor of clinical psychology and clinical effectiveness, University College London.

**Specialist contributors**
The following specialist commentators provided content for this briefing:

- Professor Tony Roth, professor of clinical psychology, University College London.
- Professor Paul Salkovskis, professor of clinical psychology and applied science, University of Bath.