

Guided Digital CBT Service Report
November 2022

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## **Executive Summary**

This report provides an evaluation of the Health Service Executive's (HSE) national digital Cognitive Behavioural Therapy (CBT) service provided by SilverCloud<sup>®</sup> to expand access to mental health care across the republic of Ireland.

The report begins with a general overview of the initiative and a summary of the milestones associated with the launch of the service to date.

Thereafter, we include an overview of the SilverCloud Clinical Operations team and how it has expanded in tandem with the growth of the service over the last 18 months.

The four subsequent sections provide analysis and discussion of referrals and activations, user demographics, user satisfaction ratings, and the status of accounts.

- GPs continue to be the source of the highest number of referrals, representing 89% of the total referrals.
- Primary Care Psychology are the referral source with the highest activation rate at 67%, with GPs accounting for the second highest rate at 66%. Community Mental Health has the lowest activation rate at 58%.
- The majority of users are female (72%), white Irish (85%), and aged between 18-44 years (76%).
- There is representation of users from all 26 counties of the Republic of Ireland. Dublin has by far the highest number of users (n = 2135). The county with the least number of users is Laois (n=22).
- The overall user satisfaction rate is 94%.

The subsequent section of the report focuses on programme usage and treatment-related improvements for programme completers.

- Users spent an average of 4.5 hours on the platform, and received an average of seven Supporter reviews.
- **43%** of those in the moderate to severe ranges (i.e. clinical levels of depression) showed reliable improvement in their depression.
- 63% of those in the moderate to severe ranges (i.e. clinical levels of anxiety) showed reliable improvement in their anxiety symptoms.
- 49% of those in moderate to moderately severe ranges (i.e. clinical levels of depression, excl. severe) transitioned to recovery from depression.
- **53%** of those in moderate ranges (i.e. clinical levels of anxiety, excl. severe) transitioned to recovery from anxiety.

The seventh section of the report presents results of two prospective research studies that have been conducted by the SilverCloud Science team, each of which were designed and conducted to provide insights into the ways in which the HSE digital CBT service could be improved.

- The first of these studies is a service needs assessment which sheds light on the barriers and facilitators reported by clinicians who are referring clients to the HSE digital CBT service.
- The second of these studies is a service improvement trial, which aimed to evaluate the feasibility and effectiveness of providing a treatment planning call to a subset of users with moderately-severe and severe depression prior to programme initiation.

The final section of the report provides the conclusions and recommendations that can be drawn from the evaluation of HSE digital CBT service to date. These include in summary:

- Education and support workstreams are needed across each referral source to increase awareness about the service and the potential benefits of the service for their respective patients and clients.
- Introduction of a self-referral option may help reduce the gender discrepancy, as males may be more likely to perceive stigma as a barrier to seeking mental health.
- Targeted national marketing and ambassador campaigns could help to improve the awareness and uptake of the initiative by clinicians in counties with lower concentrations of users such as Laois, Monaghan, and Leitrim.
- Approximately 30% of users start with minimal and mild symptoms. The SilverCloud suite of subclinical programmes (e.g., Resilience, Stress Management, and Sleep Hygiene) could be a potentially better option for these patients.
- In the face of the huge surge in demand for Children and Young people (CYP) mental health support in Ireland, SilverCloud's CYP programmes can educate, support and encourage the children and young people of Ireland to understand their mental health.

### About SilverCloud

SilverCloud® by Amwell® (NYSE: AMWL) is a leading digital mental health platform, enabling providers, health plans and employers to deliver clinically validated digital health/therapeutic care that improves outcomes and increases access and scale while reducing costs. Developed in Ireland in 2012, the multi-award-winning digital mental health platform is a result of nearly 20 years of clinical research with leading academic institutions. Today, SilverCloud is being used by more than 500 organisations globally to meet their populations' mental health needs. Global experts have clinically proven the platform through fully randomised control trials and anonymised, real-world data from over one million SilverCloud users. The platform is a leader in the industry with its effectiveness, engagement and range of clinical programs that encompasses the spectrum of mental health needs.

Learn more at www.SilverCloudHealth.com

## A note from Ken

To our colleagues at the HSE,

Through our national partnership, SilverCloud's evidencebased guided digital cognitive behaviour therapy (CBT) courses are available to referring clinicians for the adult population in Ireland. The service has seen active use double since the 12-month review of the pilot in April 2022. The service has seen over 5,000 active end users begin their journey to better mental health through referrals from GPs, Primary Care Psychologists, Counselling in Primary Care, and Jigsaw.



Results detailed in this report have shown the proven effectiveness of digital CBT, and that the SilverCloud platform enables the delivery of equally effective care to address depression and anxiety in Ireland. The ability to access care in an easier, earlier, and more effective way is essential to tackle the current mental health care crisis.

As SilverCloud's flagship customer in Ireland, the HSE is seen as innovative, progressive, and committed to leading the changing face of mental healthcare on the international stage.

Ken Cahill

Co-Founder of SilverCloud & Head of Behavioural Health, Amwell

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## **Referrals** Key Takeaways

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7,000 activated accounts

within the first 18 months of the service being launched

The majority of users are: female (72%), white Irish (85%), and aged between 18-44 years (76%).



89% of users indicated that they believed that SilverCloud Digital CBT could work for them before commencing treatment.



I want to thank my Supporter for all their assistance over the weeks. I found their feedback to be really helpful in clarifying things for me and pointing me in the right direction. I definitely benefitted a lot from this and from the entire programme. It's all been incredibly helpful and a major part of my ongoing recovery.

Hazel, 40, Galway

The Space from Anxiety programme is the most used programme (51%)

Followed by Space from Depression & Anxiety (29%) Space from Depression (17%)

## Our Referrers Key Takeaways



# 89%

of referrals are from GP's

Through working this programme I've really become aware of how these thought patterns can affect my reality, in terms of mood, energy levels physical health. I'm happy that I have the tools to swim against the tide in this regard and even change it. As my Supporter said, small consistent steps and I'll get there.

Kevin, 28, Waterford

# 68% activation rate



Primary Care Psychologists have patients with the highest activation rates. Followed by GPs at 66% activation rate.

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## Who we are helping

Key Takeaways

## **Rates of Reliable Improvement**

For users that had at least moderate symptoms at baseline:



43% for Depression

63% for Anxiety

### **Rates of Recovery**

For users that had moderate to moderately severe symptoms at baseline:



Thank you to the SilverCloud team for all the guidance and support along my journey. I know I'll have days where I might be feeling a bit low but thankfully I have the tools and knowledge now to get me through those times.

Emma, 33, Kerry

Of the **26 counties** of the Republic of Ireland, Dublin has by far the highest number of users (n = 2135). The county with the least number of users is Laois (n=22).

Overall user satisfaction rate is 94%

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## **Platform and Programme Overview**

SilverCloud is a digital platform for clients or patients to use on their journey towards better mental wellbeing, or to cope with whatever they may be going through. The platform is based on established evidence-based interventions using clinically proven Cognitive Behaviour Therapy, with the full course supported for 8 weeks, and self-guided thereafter.

The nature of the platform provides a private and confidential space for patients or clients to navigate their thoughts and feelings across smartphone, tablet or computer 24/7.

Digital CBT has been proven to help depression and anxiety by addressing their underlying symptoms, including:

Difficulty concentrating, being indecisive, restlessness

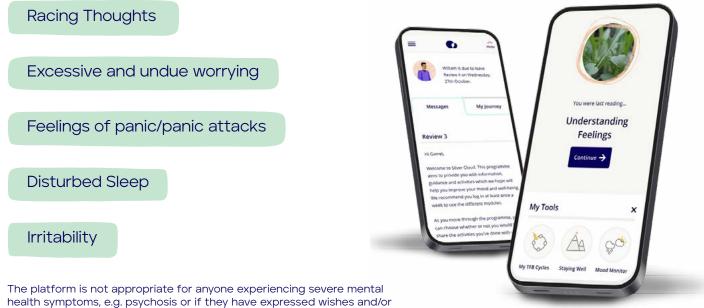
No interest or pleasure in the things you do each day

Weight loss or weight gain, changes in appetite

General fatigue or loss of energy nearly every day

Feelings of worthlessness or excessive or inappropriate guilt

Racing Heart, shortness of breath, muscle tension



plans to end their life or harm others.

The digital CBT programmes are currently only accessible to individuals if they have received an invite via a referring clinician. There are 5 sources of referrals:

GP	Primary Care Psychology
Jigsaw	Community Mental Health
Counselling in Primary Care	

Detailed descriptions of each of these programmes can be found at the end of this report.

Each of these programmes is provided with support from trained SilverCloud supporters who provide personalised guidance and feedback based on the progress and clinical symptomology of each individual service user.

The SilverCloud digital CBT programmes that have been offered through the service to date include the following:



## How to Refer

You can make referrals to the SilverCloud service via email:

## 1

Send your referral to SilverCloud@healthmail.ie with the name, DOB and email address of the client or patient and any other important referrer details. Please also include GP name in <u>case of</u> <u>escalation.</u>

## 2

The SilverCloud Admin will then contact your client or patient and invite them to create their account. This grants them access to the platform and can be done on any device.

## 3

After logging in, the client or patient will be assigned a clinical supporter, who will contact them weekly, guiding them through their journey.

## **Clinical Operations Team**

The SilverCloud Clinical Operations team supporting the HSE service has grown substantially over the last 18 months due to the success of the initial pilot. Starting out with a team comprised of just one Administrator, one Clinical Supervisor and eight supporters in April 2021, the Clinical Operations team is now made up of 23 members which includes Administrators, Supporters, Clinical Supervisors, and as of this month, a new Director of Clinical Operations. The team is extremely passionate about mental health and evidence-based digital cognitive behavioural therapy, and each member strives to ensure that the experience for both referring clinicians and service users is streamlined, efficient, and effective.

#### Pictured L to R:

Dr. Maile Coyne, Hannah Farrell and Dr. Corinne Pearson.

#### **Dr. Clair Clifford,** Director of Clinical Operations

Clair Clifford is a Clinical Psychology professional with 20 years of clinical practice, since qualifying. Since 2009, she has led assessment and treatment, developing psychology services for complex trauma in an occupational context to serving military personnel within the Ministry of Defence in multidisciplinary teams, across the UK and overseas.

#### Dr. Malie Coyne,

**Clinical Supervisor** 

Malie Coyne is a Clinical Psychologist (BA MSc DPsychSc) with more than 20 years' experience working in HSE services. Malie is best-selling Author of 'Love in, Love out: A compassionate approach to parenting your anxious child' (Harper Collins Ireland, 2020), and Adjunct Lecturer on the University of Galway Clinical Psychology Doctoral programme. She sits on the Mental Health Advisory Panel for the A Lust for Life charity and is Psychological Lead for their Mental Wellbeing Schools Programme. Through her advocacy, public speaking and media contributions, Malie shines a light on mental health issues and promotes wellbeing throughout the lifespan.

### **Dr. Corinne Pearson,** Clinical Supervisor

Corinne Pearson is a Chartered Clinical Psychologist (DClinPsy; PgDip; MSc, BSc) who is dual registered in the UK & Ireland (HCPC & PSI). She has experience in the NHS as well as the private sector and both delivering & developing psychological services. She is experienced in Clinical Leadership and supporting services in navigating regulatory standards involving the

## development of robust clinical governance processes.

#### Hannah Farrell

Supervisor of Clinical Operations

Hannah joined SilverCloud in early 2021 and came from a background in Psychology and Applied Behavioral Analysis. She holds a BA in Psychology and is currently completing a Masters in Humanistic and Integrative Psychotherapy (Clinical). Hannah has a keen interest in behavioral research with an emphasis on evidence-based treatment. Paired with her attention to detail and passion for creating innovative solutions she has used these attributes in her role in clinical operations where she has helped build the nationwide service with the HSE.

## The Supporter Team

Our supporters have a background in psychology, psychotherapy or social work, and have at least a master's degree or doctorate degree in progress. All supporters have additionally been trained in the delivery of online support and receive ongoing clinical supervision from the Clinical Supervisors. Below, are personal reflections from two team members on their experience as supporters for the HSE digital CBT service.

#### **Neil Delaney**

Behavioural Health Coach



"Working as a supporter with SilverCloud is a rewarding experience. Encountering clients from different backgrounds with a variety of experiences and supporting them through their journey to improved mental health is really special. My goal when working with clients on SilverCloud is to make sure they know they are speaking with a real human who cares about their experience on the programme and their mental health. I appreciate getting to interact with clients in a meaningful way and having the opportunity to offer some kind of support, understanding and guidance through the model of CBT."

### Orla McGovern

Behavioural Health Coach



"I have found working with SilverCloud to be such a rewarding and enjoyable experience. Having the opportunity to connect with clients and offer support through a wide range of challenges has been invaluable to me. I am constantly inspired by client progress and seeing the positive impact the programme has on clients makes me so proud to be a supporter on such an amazing team!"

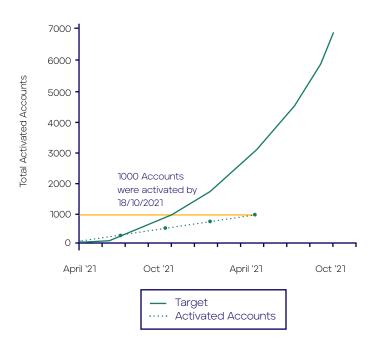


## 1. Milestones

The digital CBT service was launched in April 2021 and target milestones were established to track progress. These target milestones were to achieve 250 activated accounts within the first quarter from April to July 2021, 500 activated accounts by the end of the second quarter, 750 activated accounts by the end of the third quarter, and 1000 activated accounts by the end of the fourth quarter in April 2022.

As seen in Figure 1 below, these targets were met and exceeded at each quarter, with the overall target of 1000 activated accounts being achieved before November 2021, almost 6 months ahead of schedule.

Thereafter, the service was extended in batches of 1,000 licences in accordance with the budgetary envelope of the HSE and their goal to scale the service in a structured manner.







## 2. Referrals and Activations

Referrals are defined as the prescriptions made by clinicians who can refer patients to the SilverCloud platform. Clinicians can access information about how to make a referral through the <u>SilverCloud</u> <u>website</u>, where they can also access referral templates. Referrals then take the form of an invite that the patient receives through a secure email, in which they can simply click on a link in order to navigate to the SilverCloud platform where they can proceed to create and activate their account.

## **Referral Sources**

As can be seen Figure 2., general practitioners have been the source of the highest number of referrals, constituting 88.6% (8904) of the total 10,049 referrals (as of October 3rd 2022). Primary Care Psychology and Counselling Primary Care have been the next highest sources of referrals at 4.4% (444) and 2.9% (292), respectively.

Further information about the breakdown of referrals per referring clinician across each referral source is provided in Table 1. There is substantial variability in the number of referrals made by referring clinicians, with some clinicians within each referral source having made only one referral while others have made up to 135. Counselling Primary Care has the highest average number of referrals per referring clinician at 6.2.

## Activation Rates

Activation rate measures the number of accounts created by patients following the receipt of an invite to the platform, relative to the total number of invites (referrals) sent.

As seen in Table 2., the activation rates across referral sources range from 57.7% to 66.7%, with Primary Care Psychology accounting for the highest activation rate. These numbers are comparable to similar nation-wide SilverCloud initiatives in the United Kingdom (UK), where average activation rates of 65% have been achieved for similar referral sources within the National Health Service (NHS).

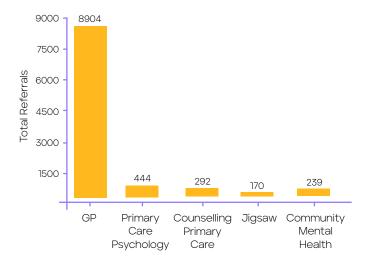


Figure 2. Total number of referrals across each referral source.

 Table 1. Mean, median, and range of total referrals made by each

 referring clinician across each referral source.

Referring Group	Total Referrals	Total Referrers	Mean (SD)	Min-Max per Referrer
General Practitioners	8904	1478	6.0 (10.7)	1-135
Primary Care Psychology	444	72	6.1 (13.2)	1-70
Counselling Primary Care	292	47	6.2 (9.8)	1-51
Jigsaw	170	47	3.6 (4.6)	1-24
Community Mental Health	239	59	4.1 (7.1)	51
Total	10049	1703	5.1 (9.1)	1-135

Note: SD = Standard Deviation.

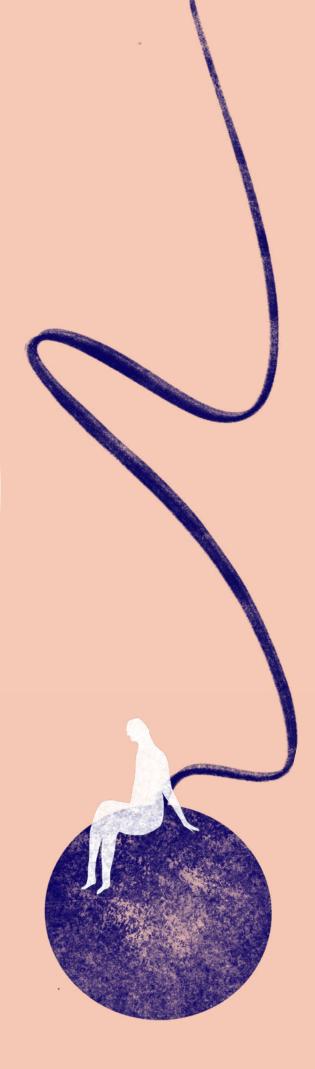
However, there are substantial differences between some referral sources, indicating that there is room for improvement in some of them. For instance, the activation rate for Community Mental Health is currently only 57.7%. Nonetheless, it is encouraging to see that the highest source of referrals, General Practitioners, also account for the second highest activation rate at 66%.

#### Table 2. Activation rates across each referral source.

Referring Group	Total referrals sent	Total activated accountst	Activation Rate (%)
GPs	8904	5867	65.9
Primary Care Psychology	444	296	66.7
Counselling Primary Care	292	190	65.1
Jigsaw	170	110	64.7
Community Mental Health	239	138	57.7
Total	10049	6601	65.7

### Summary

- The number of referrals and account activations are continuing to increase, indicating a good uptake and demand for the service among both referring clinicians and their patients.
- Given that this is a relatively new nationwide service, there is still room for continued growth in the awareness and uptake of the service by clinicians across all sources of referrals; ongoing outreach and marketing efforts will support this.
- Activation rates are good and comparable to other NHS-UK services that have achieved a similar rate of 65%.
- However, activation rates range from a high of 66.7% for Primary Care Psychology to a low of 57.7% for Community Mental Health, suggesting that there is likely room for improvement with the latter group.



## 3. User Demographics and Baseline Information

Demographic information on the digital CBT service users is presented in Table 3. Service users were primarily female, white Irish, well-educated, and aged between 18-44 years, with the three age groups in this range collectively accounting for 75.7% of the sample. There is a substantial difference between the proportions of female and male users, with females accounting for 72.1% of the sample whereas males only 26.6% of the sample are male. In terms of education level, most users had a university or postgraduate degree (64.0%), followed by secondary education (31.1%), indicating that the sample is largely well-educated.

		-	
		n	%
Age	18-24	1448	22.8
	25-34	1763	27.8
	35-44	1594	25.1
	45-54	946	14.9
	55-64	415	2.3
	65+	149	2.7
Gender	Female	4576	72.1
	Male	1686	26.6
	Other/Prefer not to say	49	0.8
Education	College/University	3282	51.7
	Postgraduate master/doctorate	781	12.3
	Secondary Education	1974	31.1
	Primary Education	130	2.0
Ethnicity	White Irish	5394	85.0
	Other White European	541	8.5
	Mixed	72	0.6
	Asian	68	1.1
	Other	68	1.1
	Black	63	1.0
	Latino	41	0.7
	Indian	35	0.6
	Arab	17	0.3
	Irish Traveller	6	0.1

#### Table 3. User Demographics.

A summary of the counties of residence of users is provided in Figure 3. There is representation of users from all 26 counties of the Republic of Ireland. However, Dublin has by far the highest number of users (n = 2135). The counties with the least number of users include Laois (n=22), Monaghan (n=24) and Leitrim (n=29).

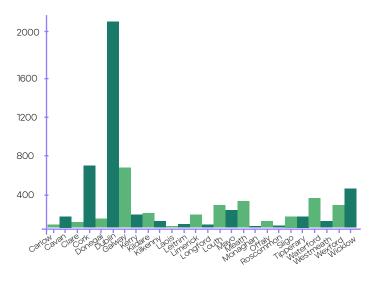


Figure 3. Distribution of counties of residence of the sample.

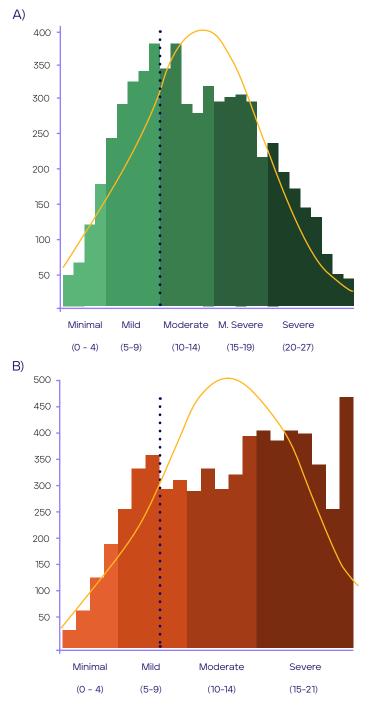
In addition to providing the demographic information summarised above users were also asked to rate how likely they thought SilverCloud CBT would work for them. The responses to this question are summarised in Table 4. Overall, there was a positive expectation regarding the benefits that users believe they will gain from the programme, with a total of 89.1% indicating that they believed that SilverCloud Digital CBT was at least somewhat likely to work for them. This is encouraging to see as research has demonstrated that positive expectations at baseline are related to positive treatment experiences and good clinical outcomes in CBT and psychotherapy in general (e.g. Tambling, 2012).

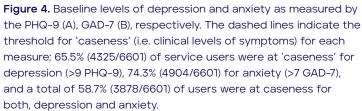
Table 4. Expectations regarding SilverCloud Digital CBT.

		n	%
	Extremely likely	186	2.9
	Very likely	1445	22.8
Expectations	Somewhat likely	4023	63.4
	Not very likely	467	7.4
	Not at all likely	57	0.9

An overview of the levels of symptom severity that service users presented with at baseline is presented in Figure 4.

A breakdown of the percentages of users assigned to each of the available programmes is shown in Figure 5. The 'Space from Anxiety programme' has the highest number of clients (51%), which is consistent with the prevalence of moderate-to-severe anxiety levels exhibited by the present sample (see Table 5).





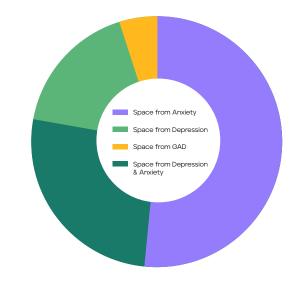


Figure 5. Programme Choice.

### Summary

- The majority of users are female and aged between 18-44 years. This is possibly a direct reflection of higher proportions of females and people in the 18-44 age range presenting to their clinicians with depression and anxiety. However, the possibility that this pattern reflects a bias among clinicians believing the platform is better suited for females or for younger populations should also be considered.
- There is representation of users from across all 26 counties within the Republic of Ireland, indicating good nationwide reach of the service. However, there are notably low numbers of users from counties such as Laois (n=22), Monaghan (n=24) and Leitrim (n=29). The possibility that this reflects lack of awareness about the digital CBT service among referring clinicians and patients within these counties should be considered
- Overall, users have positive expectations about their potential to benefit from the digital CBT programmes.
- Baseline severity levels of symptoms vary from minimal to severe, but 74.3% of service users meet the criteria for clinical levels of anxiety. And, consistent with this, the 'Space from Anxiety' and 'Space from Depression and Anxiety' are the most used programmes.

## 4. User Satisfaction

At the end of each module, users can evaluate the module by rating 4 statements on a scale from "strongly disagree" to "strongly agree. Users can rate as many of the statements as they want or skip the questionnaire entirely. Figure 6. displays the total number of ratings across all module questionnaire responses.

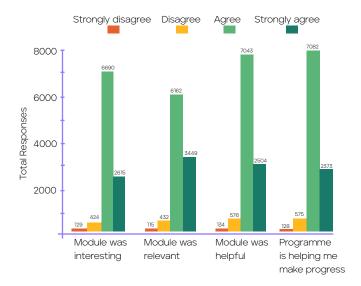


Figure 6. User Satisfaction Ratings.

The overall user satisfaction rate is 94% (percentage of all the ratings that were marked as "agree" or "strongly agree"), where 95% of users agree the modules were interesting, 95% agree the modules were relevant, 93% agree the modules were helpful, and 93% agree the program helps in making progress.



## 5. Status of Accounts

An overview of the status of accounts as of October 3rd, 2022 is presented in Table 6. Of the 65.7% (n=6601) of clients who activated an account, 92% (n=6040) have either completed treatment (n=971) or are currently in treatment (n=525). The accounts for the remaining 8% are either pending (i.e. client has not yet finished the sign-up process), deleted (i.e. client has requested for their account to be deleted), excluded (i.e. client has been excluded due to risk), new referral, paused or unsuitable.

#### Table 6. Status of accounts.

Referring Group	GP	Primary Care Psychology	Counselling Primary Care	Jigsaw	Community Mental Health	Total
Completed	4616	232	152	97	92	5189 (78.6%)
Deleted	7	1	1	-	-	9 (0.1%)
Excluded	89	6	3	I	2	101 (1.5%)
Current	764	29	16	8	34	851 (12.9%)
Pending	339	28	18	4	10	399 (6.0%)
Paused	6	-	-	-	-	6 (0.1%)
New Referral	7	-	-	-	-	7 (0.1%)
Unsuitable	39	-	-	-	-	39 (0.6%)



Accounts that are marked as Completed (n = 5189) can be assigned different reasons for completion (see Figure 7). The definitions corresponding to each of the five reasons for completion are as follows:

1) **Ended as planned:** These users received at least 75% of planned support and completed both a baseline assessment and at least one follow-up assessment.

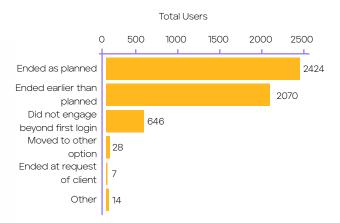
2) **Ended earlier than planned:** These users have engaged beyond the first login, but received less than 75% of planned support, and may not have responded to outreach or completed any followup assessment.

3) **Did not engage beyond the first login:** These users did not revisit the programme beyond their first login.

4) **Moved to other option:** These users were moved to other support, such as face-to-face therapy.

5) **Ended at request of client:** These users opted out, e.g. due to stressful events such as bereavement or exams.

6) **Other:** Marked as 'Completed' for a variety of other reasons that fall outside of the above criteria.



**Figure 7.** Summary of the reasons users' accounts were marked as completed.

## 6. Programme Completers

The remaining section of the report focuses on the cohort of users who met the criteria for 'Ending as planned,' (n=2424), all of whom have completed both baseline and follow-up PHQ-9 assessments.

## Programme Usage

Data relating to engagement and use of the platform is presented in Table 8. There is considerable variability across users in terms of their number of logins and time spent on the platform.

But, on average, the data on programme usage suggests a high level of engagement with the service, with the number of logins and number of reviews received being higher than those reported in the IAPT services in the United Kingdom (Richards et al., 2020) and analogous to those reported in Mindspot, a worldleading national digital CBT service that has been implemented in Australia (Battersby et al., 2020; Titov et al., 2017).

#### Table 8. Engagement and use of the platform.

(n=498)	Mean (SD)	Min-Max	Median
No. of logins	24.1(27.7)	2-460	16.0
No. of reviews	7.0(1.1)	6-13	7.0
Lenth of use (mins)	285.5(390.8)	4.6-9626.3	178.2
Time per session(mins)	12.3(8.6)	1.60-91.7	10.1

## Intervention-Related Improvements

With regard to the analysis of treatment-related improvements, it is important to distinguish between those who present with minimal-to-mild versus moderate to severe symptoms. For instance, 'recovery' metrics cannot be extracted for individuals who started with minimal-to-mild symptoms as they did not meet the threshold levels for clinical caseness at the outset, and generally have minimal room for improvement. Hence, for this subgroup, improvement rates were calculated based on an improvement of at least 1 point in PHQ-9 or GAD-7 (see Table 9). Table 9. Improvement rates for users with minimal andmild severity at baseline.

	Baseline Severity	Improvement Rate
Minimal (n=189)		72/189 (38%)
PHQ-9	Mild (n=612)	392/612 (64%)
GAD-7		64/155 (41%)
GAD-7	Mild (n=626)	373/626 (60%)

# Reliable Improvement and recovery rates

For the subset of these users that had at least moderate levels of depression and anxiety at baseline, rates of reliable improvement and recovery were calculated.

A user meets the criteria for reliable improvement when they show a decrease of at least 6 points on the PHQ-9 scale or at least 4 points on the GAD-7 scale from pre- to posttreatment.

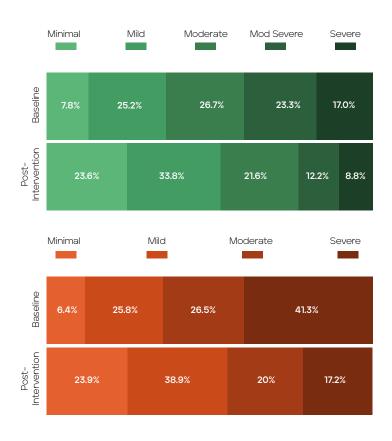
A user meets the criteria for recovery when they move from caseness (>9 on PHQ-9 or >7 on GAD-7) to non-caseness (i.e. to below these thresholds) post-intervention.

**Table 10.** Reliable improvement and recovery rates foreach baseline severity level.

	Baseline Severity	Reliable Improvement (n) (%)	Recovery (n) (%)
	Moderate	191/648 (30%)	375/648 (59%)
PHQ-9	Moderately Severe	286/564 (51%)	223/564 (40%)
	Severe	227/411 (55%)	86/411 (21%)
GAD-7	Moderate	385/643 (60%)	340/643 (53%)
GAD-/	Severe	648/1000 (65%)	312/1000 (31%)

Table 10. provides an overview of the proportions of users who met the criteria for reliable improvement and recovery for each baseline severity category. Of note, rates of reliable improvement increase as a function of baseline severity, with the highest rates of reliable improvement being observed in users who had severe levels of depression and anxiety at baseline. In contrast, rates of recovery decrease as baseline severity increases, as users need a higher magnitude of change to meet the criteria for recovery.

Pre- to post-intervention changes in the proportions of users in each severity category for depression and anxiety are presented in Figure 8. Overall, it is encouraging to see that there is a reduction in the proportion of users in the moderate to severe categories, and an increase in the proportion of users in the minimal and mild categories.



**Figure 8.** Baseline and post-intervention distributions of symptom severity for depression and anxiety as measured by the PHQ-9 (A) and GAD-7 (B), respectively.

It is additionally reassuring to see that rates of reliable deterioration from baseline to post-intervention on the PHQ-9 and GAD-7 were very low. Specifically, for the PHQ-9, the overall rate of reliable deterioration was (98/2424) 4.0%, and for the GAD-7 it was 6.3% (152/2424).

## Sub-Group Analyses

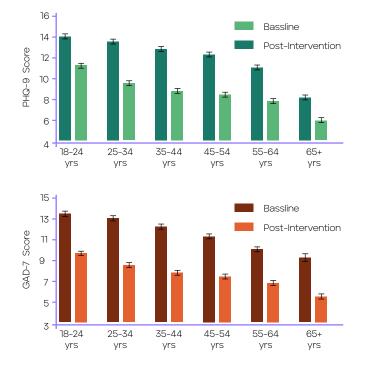
Subgroup analyses were conducted to determine the potential impact of gender and age on clinical outcomes. Encouragingly, statistically significant improvements in both depression and anxiety were evident across all subgroups (see Figure 9, Figure 10; and Table 8). This observation indicates that users can expect to benefit from the SilverCloud digital CBT programmes irrespective of their age or gender.

PH	PHQ-9		Post- Intervention	p-value	Effect Size
Gender	Female	13.04	9.5	<.001	0.907
	Male	12.53	9.62	<.001	0.746
	18-24	14.08	11.39	<.001	0.691
	25-34	13.75	9.72	<.001	1.031
Age	35-44	12.51	8.96	<.001	0.912
Group	45-54	12.08	8.80	<.001	0.841
	55-64	11.52	8.08	<.001	0.829
	65+	8.51	6.10	0.024	0.616
G/	4D-7	Baseline	Post- Intervention	p-value	Effect Size
Gender	Female	12.78	8.70	<.001	1.059
	Male	12.03	8.19	<.001	0.998
	18-24	13.51	9.99	<.001	0.915
	25-34	13.49	8.88	<.001	1.199
Age	35-44	12.55	8.30	<.001	1.104
Group	45-54	11.55	7.90	<.001	0.948
	55-64	10.25	6.69	<.001	0.924
	65+	9.51	5.67	<.001	0.998

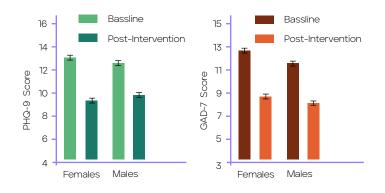
Table 11. Baseline and post-intervention symptom scores,and associated p-values and effect sizes on the PHQ-9and GAD-7 across females and males, and each level of agegroup.

That said, significant interactions between age and intervention-related outcomes were observed for both the PHQ-9 and GAD-7. In both cases, the interaction was primarily driven by 25-34 year olds and 35-44 year olds experiencing particularly large reductions in depression and anxiety scores compared to the other age cohorts. However, when interpreting this observation, it should be noted that some age cohorts, particularly service users over the age of 65 years, had relatively lower levels of symptom severity at baseline, and therefore had less room for improvement.

A significant interaction between gender and intervention-related outcomes for PHQ-9 scores was also observed. This interaction was driven by females experiencing a marginally greater magnitude of improvement in depression symptoms compared to their male counterparts.



**Figure 9.** Breakdown of baseline and post-intervention symptom scores on the PHQ-9 and GAD-7 across each level of age group.



**Figure 10**. Breakdown of baseline and post-intervention symptom scores on the PHQ-9 and GAD-7 across females and males.

### Summary

- Baseline severity levels for programme completers vary from minimal to severe.
- The majority of users in the moderateto-moderately severe ranges showed reliable improvement and transitioned to recovery, indicating that the intervention was effective for the treatment of their depression and anxiety. These rates are similar to those observed in IAPT services in the UK.
- Users in the severe range showed the highest rates of reliable improvement, but a smaller percentage achieved recovery. These results suggest that even though SilverCloud led to clinical benefits, they likely need more high-intensity support to recover from depression and anxiety, or a more extended period of treatment with follow-up. One approach to augmenting the care experience for this subgroup of service users has been explored in a study presented in the next section of the report.
- It is encouraging to see that the programmes are effective irrespective of one's gender or age groups.
- The tendency for slightly smaller effect sizes for males, and for users aged 18-25, and over the age of 65 years, indicates that there may be scope for developing targeted strategies for improving outcomes for these cohorts.

## 7. Service Development Highlights

The partnership between the HSE and SilverCloud provides the opportunity to conduct and disseminate research on data from the digital CBT service for service evaluation and service improvement purposes.

In the following two subsections of the report, we provide overviews of two prospective studies that have been conducted by the SilverCloud Science team.

## A. Service Needs Assessment:

Barriers and facilitators reported by clinicians referring to Ireland's national digital CBT service

Dan Duffy, PhD & Selin Akkol-Solakoglu, PhD October, 2022



### Overview

It is well-known that the implementation and uptake of novel, evidence-based practices within healthcare settings can be influenced by several contextual factors. In particular, buy-in on the behalf of stakeholders (i.e. the clinicians working with novel practices, such as digital CBT) has been highlighted as especially important for successful implementation and sustained uptake. Accordingly, there is a clear imperative to understand the barriers and facilitators stakeholders encounter as part of their work. Within the present study, clinicians were surveyed regarding the barriers and facilitators that they perceive to be associated with the process of referring their patients to the digital CBT service.

## Methodology

Clinicians who had previously referred at least one patient to SilverCloud were invited to complete a voluntary, anonymous, web-based survey. Through this survey, participants were requested to consider points around their time available to refer patients, protocols and processes in place to guide the referral process, information about available programme offerings and patient interest, needs and their feedback. Specifically, participants were asked:

"We would like to know a bit more about any aspects that may have facilitated you in referring people to SilverCloud: What specific factors aided or encouraged you to refer people to SilverCloud?"

• "We would like to know a bit more about any barriers you may have encountered when referring people to SilverCloud: Were there any specific factors that hindered you in referring people to SilverCloud? If so, please explain."

A total of 44 healthcare providers responded to the survey. An overview of questionnaire completion, as well as the total number of referrals made by this sample, and their likelihood to recommend SilverCloud to other colleagues supporting patients with anxiety and depression is presented in Table 1.

Survey Responders (n= 44)	%	n
Completed	86.4	38
Not completed	13.6	6
Roles (n= 44)		
General Practitioner	72.7	32
Psychologist in Primary Care	18.2	8
Clinician in Community Mental Health	6.8	3
Counsellor in Primary Care	2.3	1
Total number of referrals (n= 44)		
٦	2.3	1
2-4	11.4	5
5-10	40.9	18
11-20	25.0	וו
>21	20.5	9
Likelihood to recommend (n= 43)		
Highly likely	44.2	19
Llikely	46.5	20
Unlikely	4.7	2
Highly unlikely	4.7	2

 Table 1. Sample characteristics, the range of referrals made,

 and the likelihood to recommend digital CBT to colleagues.

## Key Highlights

A total of 38 clinicians provided qualitative responses to the open-ended questions. The barriers and facilitators reported by these clinicians when referring their patients to SilverCloud, as well as the count of instances that each specific barrier or facilitator was reported are highlighted in Table 2 and Table 3 below.

Facilitator	n		
Ease of access for patients	20		
Easy and convenient referral process for clinicians to enact	17		
Lack of other mental health support options within the HSE	13		
Suitability and patient characteristics; motivation, tech literacy, psychological mindedness, and preference for online-treatment	13		
Free service with no associated costs for patients and referrers	11		
No waiting list to access SilverCloud	וו		
CBT and digital CBT as evidence-based therapies, with proven outcomes for anxiety depression			
Positive patient feedback	8		
High levels of responsiveness from SilverCloud when processing referrals and responding to issues	7		
Recommended by other care providers	2		

**Table 2.** Responses to statement on facilitators associated with the referral of patients to SilverCloud.

Barrier	n
Lack of suitability; < 18 years old, low tech literacy and English proficiency, no internet access, high severity of symptoms patient preference for face-to-face therapy	12
Specific mention of "no barriers encountered"	10
Dissatisfaction with processes involved with actioning digital CBT referrals	7
The need for easily accessible information about the programme for patients and referrers	5
No mechanism for follow-up, where referrers desire more info on the progress of their patients	3
Poor engagement reported by patients to referrers	3
Internal mail server limitations, resulting in an inability to action referrals	2

**Table 3.** Responses to statement on barriers associated with the referral of patients to SilverCloud.

## Discussion

Clear facilitators were identified with regard to referring patients to digital CBT; the lack of a waiting list to access SilverCloud, no associated costs, positive patient feedback about the intervention and the existing evidence for cognitive behavioural therapy and its mediums of delivery (including via the internet) were among those reported most widely. Another noteworthy facilitator is the reported high levels of responsiveness from SilverCloud when clinicians refer their patients or contact them with questions, which may be important to maintain as the initiative continues to scale. Given the salience of the reported facilitators, it may be important to leverage these points across marketing and training collateral for referrers in future outreach efforts.

Suitability for digital CBT was cited as both a barrier and facilitator; low technology literacy, no internet access, not being proficient in English, and preference for face-to-face therapy were cited as limiting factors for a referral. Conversely, patients' internal motivation, tech literacy, psychological mindedness, and preference for online treatment encouraged providers to make a referral. Clinicians expressed a need to have clear and concise information regarding the digital CBT service, for both their use and patients. Clinicians additionally cited having difficulties working with the existing referral process (i.e. making referrals through email). Two participants suggested that having a Healthlink referral option could facilitate the referral process better, while also providing a means for patient notes to be centralised. Actioning on this suggestion could also potentially mitigate against the issue of healthcare providers not having access to follow-up information.

## Conclusions

The results of this survey highlight the importance of considering healthcare provider perspectives within the implementation process, and the current exploration of perceived barriers and facilitators has revealed opportunities to leverage what facilitates the referral process and what can be done to overcome existing difficulties. Given the continuous scaling of SilverCloud within the HSE, it will be important to regularly administer evaluations such as this in the future to gather further feedback for purposes of improving the experience of referrers and alleviating their pain points in this process.

## Recommendation and Next Steps

The following list contains several recommendations to improve the referral process for clinicians within the HSE. Specifically, these recommendations are based on the data collected, where referrers stated that:

1. The information on the website is unclear and not fit for purpose. We therefore propose that the website should be amended so that it clearly illustrates, through a variety of media, the effectiveness of the programme, its contents, what clients can expect through their use of SilverCloud and how referral providers can enact referrals.

2. Stakeholders (referring clinicians and service users) are unsure of what SilverCloud is and how it works. We propose an increase in the level of outreach to referring health professionals to promote awareness of the digital CBT service, with a specific focus on activities that demonstrate:

- The platform, including its functionality (e.g. therapeutic content and tools, linking with a coach) and benefits (e.g. clinical outcomes, ease of access for a variety of patient demographics).
- How to refer patients, including the procedural elements (e.g. actioning a referral over email), assessing suitability for digital CBT and tips for conducting the referral conversation with patients.
- The general value of digital CBT for supporting the HSE in their goal to increase access to mental health for the population of Ireland, including emphasis on how it is a proven and effective option, has no waitlists, is available at no costs to healthcare providers and patients, and can be accessed in a flexible manner.

3. SilverCloud marketing collateral "undersells what they can expect". Therefore, new marketing collateral for both patients and referrers could be created and made available across care centres. Physical collateral can serve to complement the information available online for providers (e.g. how to refer, the SilverCloud programmes and how the offering works), and can increase public awareness of the intervention (e.g. through posters with a SilverCloud QR code in GP surgeries). 4. It would be helpful to have a Healthlink referral option, and this could provide the following benefits:

- Referral providers can action invites to SilverCloud programmes without having to contact anyone in SilverCloud or send e-mails.
- The integration of SilverCloud into Healthlink could allow clinicians to follow-up with patients. For example, summary information such as clinical scores (e.g. PHQ-9/Depression and GAD-7/ Anxiety) and urrent patient status (e.g. still receiving coaching, disengaged with service or completed) could be shared with referrers to provide patient updates.

5. They [referrers] were satisfied with the level of responsiveness from SilverCloud, illustrating the importance of maintaining this standard when responding to the needs and requests of referring clinicians within the HSE. In particular, referring clinicians appreciated quick resolutions to the issues they encountered (e.g. speedy responses, efficiency and professionalism), and given that there will be further scaling of the service across the HSE in 2023, it is important that this is maintained. New initiatives planned by the HSE account team, including a monthly newsletter, will be key to maintaining a high level of communication with referring clinicians.

6. Lack of suitability for iCBT was a commonly encountered barrier (e.g., severity of symptoms). Experimenting with the model of service delivery to explore what works best to improve patient engagement with the SilverCloud platform for those who are not traditionally thought of as "suitable" for digital CBT is proposed. An example of this is the Treatment Planning Call trial presented on the next page.

## **B. Treatment Planning Call:**

Exploring the addition of a treatment planning phone call to supported digital CBT for users with moderately-severe and severe depression: A pilot study

Garrett Hisler, PhD & Angel Enrique, PhD



### Overview

Individuals with moderately severe or severe depression are less likely to achieve recovery during use of SilverCloud, due to the fact they need larger improvement rates to achieve the recovery threshold. Research has shown that individuals receiving scheduled telephone support (i.e. synchronous coaching) were more likely to engage with treatment and to have positive outcomes compared to asynchronous messaging (Pihlaja et al., 2020). In light of these potential benefits, this pilot study examined the feasibility and effectiveness of providing users with moderately severe and severe depression with a treatment planning phone call at the beginning of their digital CBT treatment.

## Methodology

An A/B testing design was utilized in which a historic group of 185 clients who had completed treatment as usual but were not offered a phone call (A group) were compared to a new group of 40 clients who completed treatment as usual but who also completed the preparatory phone call (B group). All clients were referred to the digital CBT service via clinicians from the HSE and had moderately-severe or severe depression (PHQ-9 > 14) at baseline. The preparatory phone call was offered to eligible clients referred to the service between 07/02/22-29/04/22 (see Figure 1 for phone call invitation and completion flow). Three supporters from the SilverCloud Clinical Operations team that support the HSE clients volunteered to take part in the trial. The aim of the call was to introduce the supporter, give an overview of SilverCloud CBT, discuss best practices, and resolve questions or concerns about the platform. These phone calls had to be completed before the second review.

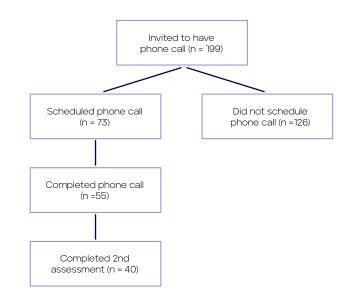


Figure 1. Participant phone call invitation and completion flow

To examine the preliminary effects of the phone call, differences in questionnaire compliance, platform usage, and clinical outcomes were examined between phone call completers and the historic comparators. To assess phone call feasibility, supporters were interviewed at post treatment to gather information about logistics, benefits, barriers, and facilitators of the phone call.

## Key Highlights

Approximately 25% of clients invited to complete the phone call, scheduled and completed the phone call (55/ 199 clients; see Figure 1). The average length of the phone call was 18.11 minutes (min-max: 10-30min).

In terms of questionnaire compliance, phone call completers were more likely to complete a follow-up PHQ-9 than historic comparators (percent completing follow-up = 72.8% vs. 48.4%, p = .001). Phone call completers had significantly more logins (Median logins: 19.00 vs. 16.00 logins, p = .03, d = 0.48), and though not statistically significant, spent about ~40 more minutes on the platform than historic comparators (Median minutes on platform: 211.13 vs. 175.32 minutes, p = .47, d = 0.05). Reliable improvement and recovery rates on the PHQ-9 and GAD-7 for the phone call completers and historic comparators are shown in Figure 2. No statistically significant differences were found between the two groups for total scores on the PHQ-9 or GAD-7. However, phone call completers had consistently higher rates of reliable improvement and recovery.

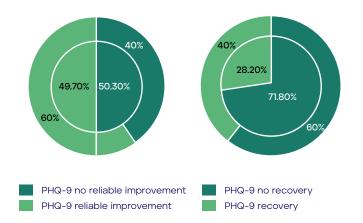


Figure 2. Clinical outcomes for phone call completers and historic comparators.

Qualitative interviews with the supporters revealed three key themes of feedback about the phone call.

1. Scheduling difficulties. Difficulties when scheduling calls due to limited supporter availability.

2. Phone call dynamics. There was variability in client engagement during the call. Supporters suggested making the call more interactive through open-ended questions.

3. Perceived benefits. Overall, the call was found to be valuable when the supporter learned more about the client's specific needs and could answer client questions about the platform.

## Conclusion

Overall, the trial yielded promising signs that offering a preparatory phone call for clients with moderatelysevere or severe baseline depression could be beneficial in terms of engagement and clinical outcomes.

Phone calls had an average duration of 18 minutes which is in line with the duration of asynchronous reviews offered through the platform, which are around 15 minutes. Supporters reported the phone call was an opportunity to better understand client needs and provide more tailored guidance, but they also highlighted issues related to the scheduling of calls and the level of interactivity of the call that would need to be improved in future iterations.

The study showed not all users are willing to partake in phone calls, which requires further research to understand the reasons behind declining the phone call.

Given that clients were not randomly assigned to receive the phone call and were allowed to self-select to complete the phone call, no causal inference can be drawn and results need to be interpreted with caution.

## Recommendations

A decision needs to be made by the HSE stakeholders account team regarding whether it is of interest to include synchronous coaching as part of the provision of the service which would be guided by further research.

Further research could include the following:

- Explore ways to better integrate the call into clinical pathways to increase client adoption and reduce supporter burden.
- Refine the call based on supporters' feedback to make it more interactive and personalised to user needs.
- Deploy a seamless research design that will facilitate insight about the incremental benefits of adding one or more calls on top of the asynchronous reviews in order to identify the optimal amount of support.
- Use a more robust experimental design which randomly assigns clients to receive or not receive the phone call would allow for more definitive inference regarding the causal effects of the phone call.

## **Concluding Recommendations**

Overall, the findings from this milestone report demonstrate the continued success of the HSE's digital CBT service. SilverCloud's recommendations for consideration are as follows:

### Education and support workstreams are needed across each referral source on the potential benefits of the service for their respective patients and clients.

Based on the clear interest from clinicians within Community Mental Health, we recommend that the HSE formally open the service to receive referrals from Community Mental Health teams nationwide.

### The notable discrepancy in the proportions of male versus female users, indicates that there is a need to highlight each referral pathway to the benefits for male users specifically. An introduction of a selfsignup option may also help reduce the discrepancy, as males may be more likely to perceive stigma as a barrier to seeking mental health.

Educating referring pathways on the potential benefits of SilverCloud to older cohorts may help to increase rates of referrals and access to the programmes for this demographic. Data from the subgroup analysis confirms that older age groups do experience significant benefits from the programmes.

### Targeted national marketing and ambassador campaigns could help to improve the awareness and uptake of the initiative by clinicians in counties with lower concentrations of users such as Laois, Monaghan, and Leitrim.

Approximately 30% of users start with minimal and mild symptoms. The SilverCloud suite of subclinical programmes (e.g., Resilience, Stress Management, and Sleep Hygiene) could be a potentially better option for these patients.

Clients in the severe group who haven't achieved recovery at the end of their SilverCloud journey could benefit from a more intense level of clinical support. In the face of the huge surge in demand for Children and Young people (CYP) mental health support in Ireland, SilverCloud's CYP programmes can educate, support and encourage the children and young people of Ireland to understand their mental health.

A dedicated future vision workshop should be organised to focus on how the existing service offering can help people right across the spectrum of mental healthcare (incl. Children and Young People, Secondary Care, Community Care and Specialty Care). This can include the full extent of the SilverCloud's programmes suite including;

- Wellbeing (E.g. Space for Self Management, Stress, Resilience, Alcohol, and Money Worries)
- Comorbid Mental Health Programmes (E.g. Chronic Pain, Diabetes, COPD)
- Eating Disorders (E.g. Positive Body Image)
- Children & Young People Programme
- Perinatal Service& Breast Cancer
- Complex Care (E.g. Bipolar Toolkit).

The results of the HSE needs assessment survey yielded important insights regarding a number of perceived barriers and facilitators that could be leveraged to improve clinicians' experiences with the referral process.

The results from the treatment planning call have provided provisional support for the potential for clients in the moderately severe and severe groups to benefit from a preparatory phone call at the beginning of treatment.

Persisting with the agenda for research on data from the digital CBT service will continue to yield insights regarding opportunities for further service improvement. I've made a lot of progress since I started SilverCloud and I find myself feeling less anxious by using CBT. I've made a lot of progress and it's definitely benefited me since I have started the programme. I also want to say thank you to the SilverCloud team, I really appreciate it.

Eoin, 19, Dublin

This report has been prepared by the SilverCloud Science team:





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## 'Space from Anxiety' Descriptor

Space from Anxiety is an online intervention aimed at alleviating psychological distress arising from anxiety related symptomology. Built in conjunction with leading content providers and clinical subject matter experts, Space from Anxiety is an easy to follow program that includes a range of tools, activities and education delivered in a safe and confidential space.

Anxiety, worry and panic are very common emotional issues (Morris, Davis & Hutchings, 1981). While they can play a healthy role in alerting us to problems or challenges, in our modern over saturated lives they can easily become overwhelming, ongoing and ultimately debilitating. The Space from Anxiety program has been developed to help service users to manage these feelings and the causes of them, ultimately offering welcome space from anxiety.

The Space from Anxiety program consists of 7 modules whose structure and content follow evidence-based principles of traditional, face-to-face, Cognitive Behavior Therapy (Beck, 2005; Ellis, 1962, 2001; Hyland & Boduszek, 2012) and incorporate values of mindfulness practice (Ma & Teasdale, 2004). The contents of each module are briefly described below.

Each module is structured in an identical way comprising an introductory quiz and video, informational content with examples and personal stories, interactive activities, homework suggestions and summaries. This is in keeping with the guiding principles of Cognitive Behavior Therapy (CBT) which endorse a structured outline and a goal orientated focus (Maerov, 2006). See the table below for an outline of goals and activities and how users are facilitated in each module.

Therapeutic concepts inherent in the program include the use of a cognitive model to create meaning. In line with Beck's cognitive theory, individuals that experience anxiety are predisposed to pay more attention to negative, threatening and catastrophic interpretations of ambiguous situations, and engage in more dysfunctional safety behaviors (Beck, 2005). Reference is made from the start of the program to the use of the thought, feeling and behavior cycle as a model through which the key points of the educational content can be applied and understood.

Problem solving strategies promote beneficial changes and aid new skill acquisition through reflection, practice and homework suggestions (Maerov, 2006). This part of the program has been informed by the second wave of cognitive therapies where change efforts are guided by social learning and cognitive principles (Hayes, Follette, & Linehan, 2004).

When participants are assigned a weekly supporter, aspects of collaborative empiricism are incorporated into the program delivery. Collaborative empiricism has been identified as an effective change mechanism in traditional CBT and refers to the process of client - therapist collaboration in the establishment of common outcome goals (Dattilio & Hanna, 2012). Through the provision of weekly personal reviews, users of the program have their experiences normalized and are supported in gathering evidence of distorted thinking with the goal of challenging such thoughts and identifying alternatives.

Empowerment occurs through experienced self-change and support. The program encourages reflective engagement of the user through the use of journal entries, module related activities and supporter review feedback. For example use of the "understanding my situation" activity (Greenberger & Padesky, 1995, p. 3-15) in the first module can help users identify personal target areas for change.

A number of "locked" mini modules are also available and allow for further tailoring of the programs to more fully meet the needs of the user. They can be "unlocked" to the user by the supporter as they see fit across programs. The mini modules include:

My Self-Esteem and I: helps users to understand the impact of self-esteem on their mood and ways to improve their self-esteem.

**Sleep Difficulties**: helps users to understand sleeping difficulties and develop a healthy sleeping routine.

**Relaxation**: help users to learn techniques and strategies for relaxation.

**Employment Support**: help users to learn to cope with the stresses associated with work and how to manage their disorder within a working environment.

**Behavioral Experiments**: help users to develop experiments to track changes in mood by making changes to their behavior.

Anger Management: help users to understand anger, and how it may be related to their mood and ways to manage anger effectively.

**Communication and Relationships**: helps users to understand their communication style and develop effective communications skills to improve personal relationships.

**Grief and Loss**: helps users to understand the grieving process and learn how to cope with loss in a healthy way.

## Specific interventions:

## Psycho-educational Content

Learning about the bidirectional relationship that exists between thoughts and feelings, feelings and behaviors, behaviors and feelings and how the reciprocal relationship between anxious experiences and cognition forms the basis of a vicious cycle that perpetuates and intensifies experience of symptomology (Morris, Davis, & Hutchings, 1981). Such content informs psycho-educational approaches to behavioral management and coping strategies, which have been found to be effective in reducing anxiety symptomology and improving overall quality of life (Rummel-Kluge, Pitschel-Walz, & Kissling, 2009).

#### Thought-Feelings-Behavior Cycles (TFB)

Monitoring anxiety and learning about its function in order to understand the positive role it can play and when to identify it as a problem. This is assessed in terms of the relationship between anxiety, behavior, thoughts, physical reactions and outcomes. This thought, feelings and behavior (TFB) cycle is a modified version of Ellis' antecedent, behavior and consequence (ABC) model used in Rational Emotive Behavioral Therapy (REBT, Ellis, 1962, 2001).

### Cognitive Behavior Therapy (CBT)

Encouraging objective evaluation of idiosyncratic internal experiences by way of 1) keeping a record of thought processes 2) labeling distorted thinking 3) identifying automatic "hot" thoughts in line with cognitive therapy framework (Beck, 2011). Challenging and restructuring negative beliefs by gathering evidence to evaluate and support these thoughts. This is where a distinction between rational and irrational beliefs can be identified and evaluated for their grounding in empirical reality. Unrealistic beliefs are then disputed and recommendations for alternative more efficient thoughts are made in line with the REBT framework (David & Szentagotai, 2006).

### **Behavior Experiments**

Using adjunctive behavior strategies to tackle avoidance and encourage graded exposure to feared situations, thoughts or feelings (Foa & Kozak, 1986). In line with emotional processing theory, carefully planned graded exposure to anxiety provoking contexts can 'overrule' old associations and reactions and help replace them with new, more neutral experiences (Foa & Kozak, 1986).

### Mindfulness

Mindfulness exercises promote the intentional and voluntary direction of attention toward present inner experience with acceptance (Hayes, Follette & Linehan 2004; Ma & Teasdale, 2004). Practicing mindfulness strategies can facilitate the recognition of anxious feelings and maladaptive thoughts, as well enhance self-monitoring and coping strategies and minimize avoidant behaviors (Roemer & Orsillo, 2002). Mindfulness practices have been evidenced as significant components in the long term effectiveness of treatments for anxiety disorders (Miller, Fletcher, & Kabat-Zinn, 1995).

Well Corporation

Module	Topics	Goals	Activities
Getting Started	<ul> <li>Psychoeducation about anxiety</li> <li>Applying CBT to anxiety</li> <li>The TFB Cycle</li> <li>Personal stories</li> </ul>	<ul> <li>Improve understanding of anxiety</li> <li>Introduce the TFB Cycle</li> <li>Learn about the role of thoughts, feelings and behav- iours in anxiety</li> <li>Learn about CBT</li> <li>Connect with the present moment</li> </ul>	<ul> <li>Anxiety Myths and Facts Quiz</li> <li>Understanding My Situation</li> <li>Mood Monitor</li> <li>Staying in the Present (Breathe)</li> </ul>
Understanding Feelings	<ul> <li>Understanding emotions and their function</li> <li>Emotions that are difficult to cope with</li> <li>Physical body reactions and mood</li> <li>Lifestyle choices</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about emotions and their role in the TFB Cycle</li> <li>Recognise emotions that are difficult to cope with</li> <li>Recognise physical body reactions</li> <li>Explore the impact of lifestyle choices on anxiety and general wellbeing</li> </ul>	<ul> <li>Emotions &amp; Your Body Quiz</li> <li>The TFB Cycle</li> <li>Mapping Lifestyle Choices</li> <li>Staying in the Present (Body Scan)</li> </ul>
Facing Your Fears	<ul> <li>Avoidance and why it should be avoided</li> <li>Safety behaviours</li> <li>Graded exposure</li> <li>Personal Stories</li> </ul>	<ul> <li>Learn about the role of avoidance in maintaining fears and anxiety</li> <li>Recognise safety behaviours</li> <li>Face fears using graded exposure</li> </ul>	<ul> <li>Facing Your Fears Quiz</li> <li>My Safety Behaviours</li> <li>Facing Your Fears</li> </ul>
Spotting Thoughts	<ul> <li>Automatic thoughts and mood</li> <li>Thinking traps</li> <li>Catching unhelpful thoughts</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the role of thoughts in anxiety within the TFB Cycle</li> <li>Recognise negative automatic thoughts</li> <li>Understand and recognise thinking traps</li> </ul>	<ul> <li>Me &amp; My Thoughts Quiz</li> <li>The TFB Cycle</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>
Challenging Thoughts	<ul> <li>Hot thoughts</li> <li>Challenging negative thoughts</li> <li>Tackling thinking traps</li> <li>Coping with difficult situations</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about hot thoughts and how to recognise them</li> <li>Learn to challenge negative thoughts</li> <li>Learn how to overcome specific thinking traps</li> <li>Recognise situations where it is necessary to use thoughts to cope</li> </ul>	<ul> <li>Your Thinking Style Quiz</li> <li>My Helpful Thoughts</li> <li>The TFB Cycle (identifying hot thoughts and generating more balanced alternative thoughts)</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>
Managing Worry (unlockable)	<ul> <li>The role of worry in maintaining anxiety</li> <li>Practical vs. hypothetical worries</li> <li>The Worry Tree</li> <li>Managing worries</li> <li>Personal stories</li> </ul>	<ul> <li>Improve knowledge of worry and its role in anxiety</li> <li>Recognise practical or hypothetical worries</li> <li>Use the Worry Tree to manage worries</li> <li>Identify and use other strategies to manage worry</li> </ul>	<ul> <li>Anxious Thoughts &amp; Worries</li> <li>My Worries</li> <li>Worry Tree</li> <li>Staying in the Present (Breathe)</li> </ul>
Bringing it All Together	<ul> <li>Finishing up</li> <li>Warning signs and planning for wellness</li> <li>Social support</li> <li>Preparing for the future</li> <li>Preparing for relapse</li> <li>Personal stories</li> </ul>	<ul> <li>Preparation for coming to the end of the programme</li> <li>Recognise the importance of social support in staying well</li> <li>Identify warning signs</li> <li>Planning for staying well</li> <li>Set goals for the future</li> </ul>	<ul> <li>Your Backup and Support Network</li> <li>Staying Well Plan</li> <li>Goals</li> <li>Taking Stock</li> <li>Staying in the Present (Sounds)</li> </ul>

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## **'Space from Depression' Descriptor**

The Space from Depression programme has been designed to relieve the symptoms of depression by:

- Focusing on developing more flexible ways of thinking
- Increasing awareness and understanding of emotions
- Increasing activity and motivation in daily life.

The programme is accessible 24/7, allowing users to access the programme at a time that suits them and in the comfort of their own home.

## **Programme Modules**

#### **Getting Started**

This module introduces the user to Cognitive Behavioural Therapy and how the Thoughts, Feelings Behaviour (TFB) Cycle can be a useful tool in understanding depression. This module also contains a psycho-educational component to introduce the user to the cycle of depression and the emotional, cognitive and behavioural aspects of depression. The user is also provided with a number of activities to enable them to become more aware of their mood and to understand their situation.

#### **Understanding Feelings**

This module focuses on the "feelings" component of the TFB Cycle in Depression. The aim of this module is to help the user to understand and identify their emotions and their association with low mood. This module also addresses the physical body reactions that are associated with depression, and the importance of considering the impact of lifestyle choices on low mood. The user can begin to build their own TFB cycles and track the impact of their lifestyle choices on their low mood in this module.

#### **Boosting Behaviour**

This module focuses on one of the core issues of depression – inactivity and a lack of motivation. The user is introduced to the cycle of inactivity and its role in maintaining depression. This module helps to user to identify ways to motivate themselves to engage in pleasurable activities and activities that provide a sense of achievement. The user also learns about practical strategies to tackle the unpleasant physical feelings associated with depression.

#### **Spotting Thoughts**

This module focuses on the "thoughts" component of the TFB cycle and introduces the user to negative thinking and its impact on mood. The user is introduced to a number of thinking traps and is encouraged to examine the outcomes of TFB cycles.

The activities allow the user to continue to build their TFB cycle and evaluate the outcome of each cycle they create.

#### **Challenging Thoughts**

This module focuses on taking action against negative thoughts. The user is introduced to "hot thoughts" and their impact on their low mood. This module helps the user to learn techniques to tackle the various thinking traps that are common in depression and to identify alternative ways of thinking. This module also introduces the user to coping thoughts and helpful self-talk thoughts.

#### **Bringing It Altogether**

This module prepares the user for coming to the end of the programme and focuses on helping the user to stay well in the future. The user learns about warning signs that their mood is deteriorating and how to plan to ensure that they stay well. This module also highlights the importance of social support and continuing to use the skills and techniques that they have learned to prevent future relapse. The user has the opportunity to review the expectations that they had at the start of the programme and can set goals for the future.

#### Core Beliefs (Unlockable content)

Many people with depression struggle with the "thoughts" component of the TFB cycle. Although they may be able to identify unhelpful thoughts and thinking traps, they may struggle to identify alternatives or generate coping thoughts. The Core Beliefs module was developed to specifically target the deeplyheld core beliefs that are the underlying root of these unhelpful thoughts and keep the cycle of depression and low mood going. This module helps the user to identify healthy and unhealthy core beliefs and teaches them strategies to challenge core beliefs.

#### Table: Modules, Topics, Goals and Activities of the programme

Module	Topics	Goals	Activities
Getting Started	<ul> <li>Psychoeducation regarding depression</li> <li>Applying CBT to depression</li> <li>The TFB Cycle</li> <li>Personal stories</li> </ul>	<ul> <li>Improve understanding of depression</li> <li>Introduce the TFB Cycle</li> <li>Learn about the role of thoughts, feelings and behaviors in depression</li> <li>Learn about CBT</li> <li>Connect with the present moment</li> </ul>	<ul> <li>Depression Myths &amp; Facts Quiz</li> <li>Understanding My Situation</li> <li>Mood Monitor</li> <li>Staying in the Present (Breathe)</li> </ul>
Understanding Feelings	<ul> <li>Understanding emotions and their function</li> <li>Managing emotions that are difficult to cope with</li> <li>Physical body reactions and mood</li> <li>Lifestyle choices</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about emotions and their role in the TFB Cycle</li> <li>Recognize emotions that are difficult to cope with</li> <li>Recognize physical body reactions</li> <li>Explore the impact of lifestyle choices on depression and well-being</li> </ul>	<ul> <li>Emotions &amp; Your Body Quiz</li> <li>The TFB Cycle</li> <li>Mapping Lifestyle Choices</li> <li>Staying in the Present (Body Scan)</li> </ul>
Boosting Behaviour	<ul> <li>Psychoeducation regarding the role of behavior in boosting mood</li> <li>Behavioral traps in depression</li> <li>Increasing activity level</li> <li>Helpful and unhelpful supports</li> <li>Getting motivated</li> <li>The importance of achievements and pleasura- ble activities</li> <li>Changing physical body reactions to improve mood</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the link between mood and behaviors</li> <li>Improve knowledge of common behavioral traps and how to beat them</li> <li>Learn tips on how to get motivated during periods of low mood</li> <li>Recognize the importance of pleasurable activities and achievements in boosting mood</li> <li>Identify activities to target distressing physical sensations associated with depression</li> </ul>	<ul> <li>Mood &amp; Behaviour Quiz</li> <li>Your Backup and Support Network</li> <li>My Motivational Tips</li> <li>My Activities</li> <li>Your Mood and Your Body</li> <li>Activity Scheduling</li> <li>Staying in The Present (Mindful Eating)</li> </ul>
Spotting Thoughts	<ul> <li>Automatic thoughts and mood</li> <li>Thinking traps</li> <li>Catching unhelpful thoughts</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the role of thoughts in depression within the TFB Cycle</li> <li>Recognize negative automatic thoughts</li> <li>Understand and recognize thinking traps</li> </ul>	<ul> <li>Me &amp; My Thoughts Quiz</li> <li>The TFB Cycle</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>
Challenging Thoughts	<ul> <li>Hot thoughts</li> <li>Challenging negative thoughts</li> <li>Tackling thinking traps</li> <li>Coping with difficult situations</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about hot thoughts and how to recognize them</li> <li>Learn to challenge negative thoughts</li> <li>Learn how to overcome specific thinking traps</li> <li>Recognize situations where it is necessary to use thoughts to cope</li> </ul>	<ul> <li>Your Thinking Style Quiz</li> <li>My Helpful Thoughts</li> <li>The TFB Cycle (identifying hot thoughts and generating more balanced alternative thoughts)</li> <li>Staying in the Present Watching Thoughts)</li> </ul>

## 'Space from Depression & Anxiety' Descriptor

## **Program Modules**

#### **Getting Started**

This module introduces the user to Cognitive Behavioral Therapy and explores how it can help the user to understand what's going on inside them and make changes to feel better. It also introduces the user to two of the key tools in the program – the Mood Monitor and the CBT Cycle..

#### **Understanding Anxiety & Depression**

This module introduces the user to the cycle of anxiety and depression and the emotional, cognitive, physical and behavioral aspects of anxiety and depression. The user is also provided with activities to enable them to reflect on and understand their situation.

#### **Noticing Feelings**

This module focuses on emotions and physical sensations. The aim of this module is to help the user to understand and identify their emotions and their association with low mood. This module also addresses the physical sensations that are associated with depression, and the importance of considering the impact of lifestyle choices on low mood. The user can begin to build their own CBT cycles and track the impact of their lifestyle choices on their low mood in this module.

#### **Boosting Behavior**

This module focuses on one of the core issues of depression – inactivity and a lack of motivation. The user is introduced to the cycle of inactivity and its role in maintaining depression. This module helps to user to identify ways to motivate themselves to engage in pleasurable activities and activities that provide a sense of achievement. The user also learns about practical strategies to tackle the unpleasant physical feelings associated with depression.

#### Spotting Thoughts

This module focuses on the "thoughts" component of the TFB cycle and introduces the user to negative thinking and its impact on mood. The user is introduced to a number of thinking traps and is encouraged to examine to the outcomes of TFB cycles. The activities allow to user to continue to build their TFB cycle and evaluate the outcome of each cycle they create.

#### **Challenging Thoughts**

This module focuses on taking action against negative thoughts. The user is introduced to "hot thoughts" and their impact on their anxiety. This module helps the user to learn techniques to tackle the various thinking traps that are common in anxiety and to identify alternative ways of thinking. This module also introduces the user to coping thoughts and helpful self-talk thoughts.

#### **Bringing It Altogether**

This module prepares the user for coming to the end of the program and focuses on helping them stay well in the future. The user learns about warning signs that their mood is deteriorating, what triggers their anxiety and how to plan to ensure that they stay well. This module also highlights the importance of social support and continuing to use the skills and techniques that they have learned to prevent future relapse. The user has the opportunity to review the expectations that they had at the start of the program and can set goals for the future.

#### Core Beliefs (Unlockable content)

Many people with depression struggle with the "thoughts" component of the CBT cycle. Although they may be able to identify unhelpful thoughts and thinking traps, they may struggle to identify alternatives or generate coping thoughts. The Core Beliefs module was developed to specifically target the deeply held core beliefs that are the underlying root of these unhelpful thoughts and keep the cycle of depression and low mood going. This module helps the user to identify healthy and unhealthy core beliefs and teaches them strategies to challenge core beliefs and generate more balanced alternatives.

#### Facing Your Fears (Unlockable content)

The aim is to help users break their fears down so that they can start to face them and reduce their anxiety. The user is introduced to the technique of 'graded exposure' and the activities help them to make a plan to gradually overcome their fears.

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Module	Topics	Goals	Activities
Getting Started	<ul> <li>Introduction of CBT model</li> <li>The CBT Cycle</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about CBT</li> <li>Introduce the Mood Monitor</li> <li>Introduce the CBT Cycle</li> <li>Learn how thoughts, emotions, physical sensations and behaviors affect each other</li> <li>Connect with the present moment</li> </ul>	<ul> <li>Mood Monitor</li> <li>My CBT Cycles</li> <li>Staying in the Present (Breathe)</li> </ul>
Understanding Depression & Anxiety	<ul> <li>Psychoeducation regarding depression and anxiety</li> <li>Applying CBT to depression and anxiety</li> <li>The cycle of depression</li> <li>The cycle of anxiety</li> <li>Personal stories</li> </ul>	<ul> <li>Improve understanding of depression</li> <li>Learn about the role of thoughts, emotions, physical sensations and behaviors in depression</li> <li>Facilitate users to reflect on their own personal circumstances</li> </ul>	<ul> <li>Myths &amp; Facts Quiz</li> <li>Understanding My Situation</li> <li>Staying in the Present (Body Scan)</li> </ul>
Managing Worry	<ul> <li>The role of worry in maintaining anxiety</li> <li>Practical vs. hypothetical Worries</li> <li>The Worry Tree</li> <li>Managing worries</li> <li>Personal stories</li> </ul>	<ul> <li>Improve knowledge of worry and its role in anxiety</li> <li>Recognise practical or hypothetical worries</li> <li>Use the Worry Tree to manage worries</li> <li>Identify and use other strategies to manage worry</li> </ul>	<ul> <li>Anxious Thoughts &amp; Worry Quiz</li> <li>My Worries</li> <li>Worry Tree</li> <li>Staying in the Present (Breathe)</li> </ul>
Noticing Feelings	<ul> <li>Understanding emotions and their function</li> <li>Managing emotions that are difficult to cope with</li> <li>Physical sensations and mood</li> <li>Lifestyle choices</li> <li>Changing physical sensa- tions to improve mood</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about emotions and their role in the CBT Cycle</li> <li>Recognize emotions that are difficult to cope with</li> <li>Recognize physical sensations</li> <li>Identify activities to target distressing physical sensations associated with depression and anxiety</li> <li>Explore the impact of lifestyle choices on depression, anxiety and well-being</li> </ul>	<ul> <li>Emotions &amp; Your Body Quiz</li> <li>My CBT Cycles</li> <li>Mapping Lifestyle Choices</li> <li>Staying in the Present (Progressive Muscle Relaxation)</li> </ul>
Boosting Behavior	<ul> <li>Psychoeducation about mood boosting behaviors</li> <li>Behavioral traps in depression</li> <li>Increasing activity level</li> <li>Helpful and unhelpful supports</li> <li>Getting motivated</li> <li>The importance of achievements and pleasurable activities</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the link between mood and behaviors</li> <li>Improve knowledge of common behavioral traps and how to beat them</li> <li>Learn tips on how to get motivated during periods of low mood</li> <li>Recognize the importance of pleasurable activities and achievements in boosting mood</li> </ul>	<ul> <li>Mood &amp; Behavior Quiz</li> <li>My Motivational Tips</li> <li>My Activities</li> <li>Your Mood and Your Body</li> <li>Activity Scheduling</li> <li>Staying in The Present (Mindful Eating)</li> </ul>
Spotting Thoughts	<ul> <li>Automatic thoughts and mood</li> <li>Thinking traps</li> <li>Catching unhelpful thoughts</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the role of thoughts in depression and anxiety within the CBT Cycle</li> <li>Recognize negative automatic thoughts</li> <li>Understand and recognize thinking traps</li> </ul>	<ul> <li>Me &amp; My Thoughts Quiz</li> <li>My CBT Cycles</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>

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Cont'd

Module	Topics	Goals	Activities
Challenging Thoughts	<ul> <li>Hot thoughts</li> <li>Challenging negative thoughts</li> <li>Tackling thinking traps</li> <li>Coping with difficult situations</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about hot thoughts and how to recognize them</li> <li>Learn to challenge negative thoughts</li> <li>Learn how to overcome specific thinking traps</li> <li>Recognize situations where it is necessary to use thoughts to cope</li> </ul>	<ul> <li>Your Thinking Style Quiz</li> <li>My Helpful Thoughts</li> <li>My CBT Cycles (identifying hot thoughts and generating more balanced alternative thoughts)</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>
Managing Worry	<ul> <li>The role of worry in maintaining anxiety</li> <li>Practical vs. hypothetical worries</li> <li>The Worry Tree</li> <li>Managing worries</li> <li>Personal stories</li> </ul>	<ul> <li>Improve knowledge of worry and its role in anxiety</li> <li>Recognize practical or hypothetical worries</li> <li>Use the Worry Tree to manage worries</li> <li>Identify and use other strategies to manage worry</li> </ul>	<ul> <li>Anxious Thoughts &amp; Worry Quiz</li> <li>My Worries</li> <li>Worry Tree</li> <li>Staying in the Present (Breathe)</li> </ul>
Core Beliefs (Unlockable)	<ul> <li>What are core beliefs</li> <li>Where do core beliefs come from</li> <li>Identifying core beliefs</li> <li>Challenging core beliefs</li> <li>Balancing core beliefs</li> <li>Personal stories</li> </ul>	<ul> <li>Improve understanding of core beliefs and where they come from</li> <li>Improve knowledge on how to recognize hot thought themes and underlying core beliefs</li> <li>Learn how to challenge core beliefs by finding evidence</li> <li>Learn to balance core beliefs using balanced alternatives</li> <li>Gain insight into experiences of core belief</li> </ul>	<ul> <li>Core Beliefs Quiz Core Beliefs (Identifying, challenging, balancing, and strengthening)</li> </ul>
Facing Your Fears (Unlockable)	<ul> <li>Avoidance and why it should be avoided</li> <li>Safety behaviors</li> <li>Graded exposure</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the role of avoid- ance in maintaining fears and anxiety</li> <li>Recognize safety behaviors</li> <li>Face fears using graded ex- posure</li> </ul>	<ul> <li>Facing Your Fears Quiz</li> <li>My Safety Behaviors</li> <li>Facing Your Fears</li> </ul>
Bringing it All Together	<ul> <li>Finishing up</li> <li>Warning signs and planning for wellness</li> <li>Social support</li> <li>Preparing for the future</li> <li>Preparing for relapse</li> <li>Personal stories</li> </ul>	<ul> <li>Preparation for coming to the end of the program</li> <li>Recognize the importance of social support in staying well</li> <li>Identify warning signs</li> <li>Planning for staying well</li> <li>Set goals for the future</li> </ul>	<ul> <li>Your Backup and Support Network</li> <li>Staying Well Plan</li> <li>Goals</li> <li>Taking Stock</li> <li>Staying in the Present (Sounds)</li> </ul>

## 'Space from GAD' Descriptor

The Space from GAD programme has been designed to relieve the symptoms of GAD by:

- Focusing on developing more flexible ways of thinking
- Increasing awareness and understanding of emotions
- Increasing understanding of the role of worry in GAD
- Focusing on problem-solving strategies to cope more effectively with worry

The programme is accessible <sup>24</sup>/<sub>7</sub>, allowing users to access the programme at a time that suits them and in the comfort of their own home.

## **Programme Modules**

#### **Getting Started**

This module introduces the user to Cognitive Behavioural Therapy and how the Thoughts, Feelings Behaviour (TFB) Cycle can be a useful tool in understanding anxiety. This module also contains a psycho-educational component to introduce the user to the cycle of anxiety and the emotional, cognitive and behavioural aspects of anxiety. This component also includes information on the symptoms of GAD and the role of the intolerance of uncertainty in maintaining anxiety in GAD. This module includes a number of activities to enable the user to become more aware of their mood and to understand their situation.

#### **Understanding Feelings**

This module focuses on the "feelings" component of the TFB Cycle in anxiety. The aim of this module is to help the user to understand and identify their emotions and their association with feelings of anxiety. This module also addresses the physical body reactions, in particular the" fight or flight" response, which are common in those experiencing anxiety. The importance of considering the impact of lifestyle choices on anxiety is also addressed in this module. The user can begin to build their own TFB cycles and track the impact of their lifestyle choices on their anxiety.

#### Managing Worry

Intolerance of uncertainty is often the core issue of GAD and is responsible for the core symptom of GAD - worry. The Managing Worry module helps the user to understand the role of worry in maintaining anxiety and learn to define worries as those that are practical and those that are hypothetical. This module also encourages the user to take action against their worries through a variety of worry management strategies, including the worry tree.

#### **Spotting Thoughts**

This module focuses on the "thoughts" component of the TFB cycle and introduces the user to negative thinking and its impact on mood. The user is introduced to a number of thinking traps and is encouraged to examine to the outcomes of TFB cycles. The activities allow to user to continue to build their TFB cycle and evaluate the outcome of each cycle they create.

#### **Challenging Thoughts**

This module focuses on taking action against negative thoughts. The user is introduced to "hot thoughts" and their impact on their anxiety. This module helps the user to learn techniques to tackle the various thinking traps that are common in anxiety and to identify alternative ways of thinking. This module also introduces the user to coping thoughts and helpful self-talk thoughts.

#### **Bringing It Altogether**

This module prepares the user for coming to the end of the programme and focuses on helping the user to stay well in the future. The user learns about warning signs that their mood is deteriorating and how to plan to ensure that they stay well. This module also highlights the importance of social support and continuing to use the skills and techniques that they have learned to prevent future relapse. The user has the opportunity to review the expectations that they had at the start of the programme and can set goals for the future.

#### Facing Your Fears (Unlockable Content)

Although worry and intolerance of uncertainty are often the core issues of GAD, many people with GAD also avoid anxiety provoking situations or objects to escape the distressing emotional and physical responses in these situations. This module helps the user to understand the long-term adverse effects of avoidance and encourages the user to face their fears through gradual progressive exposure to their feared objects or situations. The user can develop their own hierarchy of fears and record their progress in an exposure diary.

### Table: Summary of the goals and activities in each module

Module	Topics	Goals	Activities
Getting Started	<ul> <li>Psychoeducation about anxiety</li> <li>Psychoeducation about GAD</li> <li>Applying CBT to anxiety</li> <li>The TFB Cycle</li> <li>Personal stories</li> </ul>	<ul> <li>Improve knowledge of anxiety in general</li> <li>Improve understanding of GAD</li> <li>Introduce the TFB Cycle</li> <li>Learn about the role of thoughts, feelings and behaviours in anxiety</li> <li>Learn about CBT</li> <li>Connect with the present moment</li> </ul>	<ul> <li>Anxiety Myths &amp; Facts Quiz</li> <li>Understanding My Situation</li> <li>Mood Monitor</li> <li>Staying in the Present (Breathe)</li> </ul>
Understanding Feelings	<ul> <li>Understanding emotions and their function</li> <li>Emotions that are difficult to cope with</li> <li>Physical body reactions and mood</li> <li>Lifestyle choices</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about emotions and their role in the TFB Cycle</li> <li>Recognise emotions that are difficult to cope with</li> <li>Recognise physical body reactions</li> <li>Explore the impact of lifestyle choices on anxiety and well-being</li> </ul>	<ul> <li>Emotions &amp; Your Body Quiz</li> <li>The TFB Cycle</li> <li>Mapping Lifestyle Choices</li> <li>Staying in the Present (Body Scan)</li> </ul>
Managing Worry	<ul> <li>The role of worry in maintaining anxiety</li> <li>Practical vs. hypothetical Worries</li> <li>The Worry Tree</li> <li>Managing worries</li> <li>Personal stories</li> </ul>	<ul> <li>Improve knowledge of worry and its role in anxiety</li> <li>Recognise practical or hypo- thetical worries</li> <li>Use the Worry Tree to manage worries</li> <li>Identify and use other strate- gies to manage worry</li> </ul>	<ul> <li>Anxious Thoughts &amp; Worry Quiz</li> <li>My Worries</li> <li>Worry Tree</li> <li>Staying in the Present (Breathe)</li> </ul>
Spotting Thoughts	<ul> <li>Automatic thoughts and mood</li> <li>Thinking traps</li> <li>Catching unhelpful thoughts</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the role of thoughts in anxiety within the TFB Cycle</li> <li>Recognise negative automatic thoughts</li> <li>Understand and recognise thinking traps</li> </ul>	<ul> <li>Me &amp; My Thoughts Quiz</li> <li>The TFB Cycle</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>
Challenging Thoughts	<ul> <li>Hot thoughts</li> <li>Challenging negative thoughts</li> <li>Tackling thinking traps</li> <li>Coping with difficult situations</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about hot thoughts and how to recognise them</li> <li>Learn to challenge negative thoughts</li> <li>Learn how to overcome specific thinking traps</li> <li>Recognise situations where it is necessary to use thoughts to cope</li> </ul>	<ul> <li>Your Thinking Style Quiz</li> <li>My Helpful Thoughts</li> <li>The TFB Cycle (identifying hot thoughts and generating more balanced alternative thoughts)</li> <li>Staying in the Present (Watching Thoughts)</li> </ul>
Facing Your Fears (Unlockable)	<ul> <li>Avoidance and why it should be avoided</li> <li>Safety behaviours</li> <li>Graded exposure</li> <li>Personal stories</li> </ul>	<ul> <li>Learn about the role of avoid- ance in maintaining fears and anxiety</li> <li>Recognise safety behaviours</li> <li>Face fears using graded exposure</li> </ul>	<ul> <li>Facing Your Fears Quiz</li> <li>My Safety Behaviours</li> <li>Facing Your Fears</li> </ul>

