

SilverCloud®  
by Amwell®



# Guided Digital CBT Service Report August 2023

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# Executive Summary

This report provides the fourth evaluation of the Health Service Executive's (HSE) national digital Cognitive Behavioural Therapy (CBT) service provided by SilverCloud® 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 2 years.

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

- GP's continue to be the source of the highest number of referrals, representing 90% of the total referrals.
- Counselling in Primary Care and Primary Care Psychology are the referral sources with the highest activation rate at 69% and 68%, respectively. GPs closely follow with an activation of 67%. The referral source with the lowest activation rate is Jigsaw at 61%.
- The majority of users are female (72%), white Irish (86%), 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 = 3,781). The county with the least number of users is Monaghan (n=56).
- The overall user satisfaction rating remains high at 94%.

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

- Users spent an average of 4.9 hours on the platform, and received an average of seven Supporter reviews.
- 49% of those in the moderate to severe ranges (i.e. clinical levels of depression) showed reliable improvement in their depression.
- 59% of those in the moderate to severe ranges (i.e. clinical levels of anxiety) showed reliable improvement in their anxiety symptoms.
- 47% of those in moderate to moderately severe ranges (i.e. clinical levels of depression, excl. severe) have achieved recovery from depression
- 49% of those in moderate ranges (i.e. clinical levels of anxiety, excl. severe) have achieved recovery from anxiety.

The seventh section of the report presents some updates around service development that have been implemented since the last milestone report:

- A question on sexual orientation has been added to the demographics questionnaire. Capturing information on this demographic variable will provide insight on how to address LGBTQ mental health disparities. Preliminary analyses of the data acquired from this question to date are presented in this sub-section
- The Work, Productivity, Activity and Impairment (WPAI) questionnaire was added to the assessment battery. This questionnaire asks users to self-report on the impact that their depression and/or anxiety has on work-related outcomes (WRO) such as absenteeism, presenteeism, overall work performance, as well as non-work activities over the previous 7 days. Some preliminary results from the analysis of the WPAI data are reported on in this subsection.
- The comorbid programme (*Space from Anxiety and Depression*) has been added to the Client's Choice pathway. This should allow for more people who meet the criteria for both anxiety and depression to avail of a programme that will help them their symptoms in both of these symptom domains.

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:

- The clinician education and promotion strategies discussed at the workshop in May of this year need to be acted on to enable better understanding and uptake of the service amongst clinicians and their respective patients and clients.
- The persisting discrepancy in the proportions of male versus female users, highlights the need to develop awareness about the availability and potential benefits of the digital CBT service for males.
- Introducing a self-signup pathway may also help reduce this gender discrepancy, as males may be more likely to perceive stigma as a barrier to seeking help for depression and anxiety.
- Older adults continue to only represent 2.3% of the service user population. Since the subgroup analyses have confirmed that older age groups experience significant benefits from the programmes, efforts to increase awareness about this observation could be worthwhile.
- 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.
- A large proportion of users are not completing a follow-up assessment. This limits the extent to which the impact of the service can be evaluated. One strategy to consider for increasing assessment completion rate may be to reduce the interval between the baseline assessment and the first follow-up assessment.
- Preliminary analysis of the data on sexual orientation that is available to date provides reason to be optimistic that the service is providing effective support for individuals across each sexual orientation category. However, it will be important to monitor the clinical outcomes for the subgroup that report "other" for their sexual orientation when sufficient data on this group has been acquired.

# Key Takeaways - Referrals



12,383 accounts activated since the service was launched in April 2021.



The majority of users have been female (72%), white Irish (86%), and aged between 18-44 years (76%).



90% of users indicated that they believed that SilverCloud Digital CBT could work for them before commencing treatment.



The Anxiety programme is the **most used** programme (50%) followed by Depression & Anxiety programme (29%) and Depression programme (18%).

“ I feel I have learned so much and been able to manage some major issues and dealt with them a lot better than in the past and been reminded so much ah how important it is to be gently and easy on myself. ”

Ruby, 42, Sligo

# Key Takeaways - Our Referrers



90% of referrals are from GP's.



68% activation rate.  
Primary Care Psychologists  
have patients with the highest  
activation rates. Followed by GPs  
at 66% activation rate.

“ It honestly feels like I've taken my power back and look at life through a more compassionate and positive lense. I'm certain I have all the tools now to move forward with my life but I do feel its still important to keep an eye on my moods and watch out for signs I could be slipping back into my old ways again. ”

Dan, 34, Kilkenny

# Key Takeaways - Who we are helping



**Rates of Reliable Improvement:**  
For users that had at least moderate symptoms at baseline: 49% for Depression, 59% for Anxiety.



**Rates of Recovery:**  
For users that had moderate to moderately severe symptoms at baseline: 47% for Depression, 49% for Anxiety



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%.

“ Now that I've finished the programme and got to implement it in my life I can truly see the results and I'm so impressed with how well I took to it. ”

Emma, 57, Kerry

# Clinical Operations Team

The SilverCloud Clinical Operations team supporting the HSE service has grown substantially over the last 2 years. 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 27 members which includes Administrators, Supporters, Clinical Supervisors, and Manager 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.



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.



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.



Cathy Culloty is a Psychotherapist and Clinical supervisor with over 14 year's experience working in the mental health field. She has been involved in the setting up of inpatient and outpatient treatment facilities in Dublin and specialises in addiction. She holds a masters and has published many journal articles on mental health and wellbeing. Cathy also works in DCU in the student Counselling service and is passionate about helping people overcome their mental health struggles and life challenges.



Hannah joined SilverCloud in early 2021 and came from a background in Psychology and Applied Behavioural 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 behavioural 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.

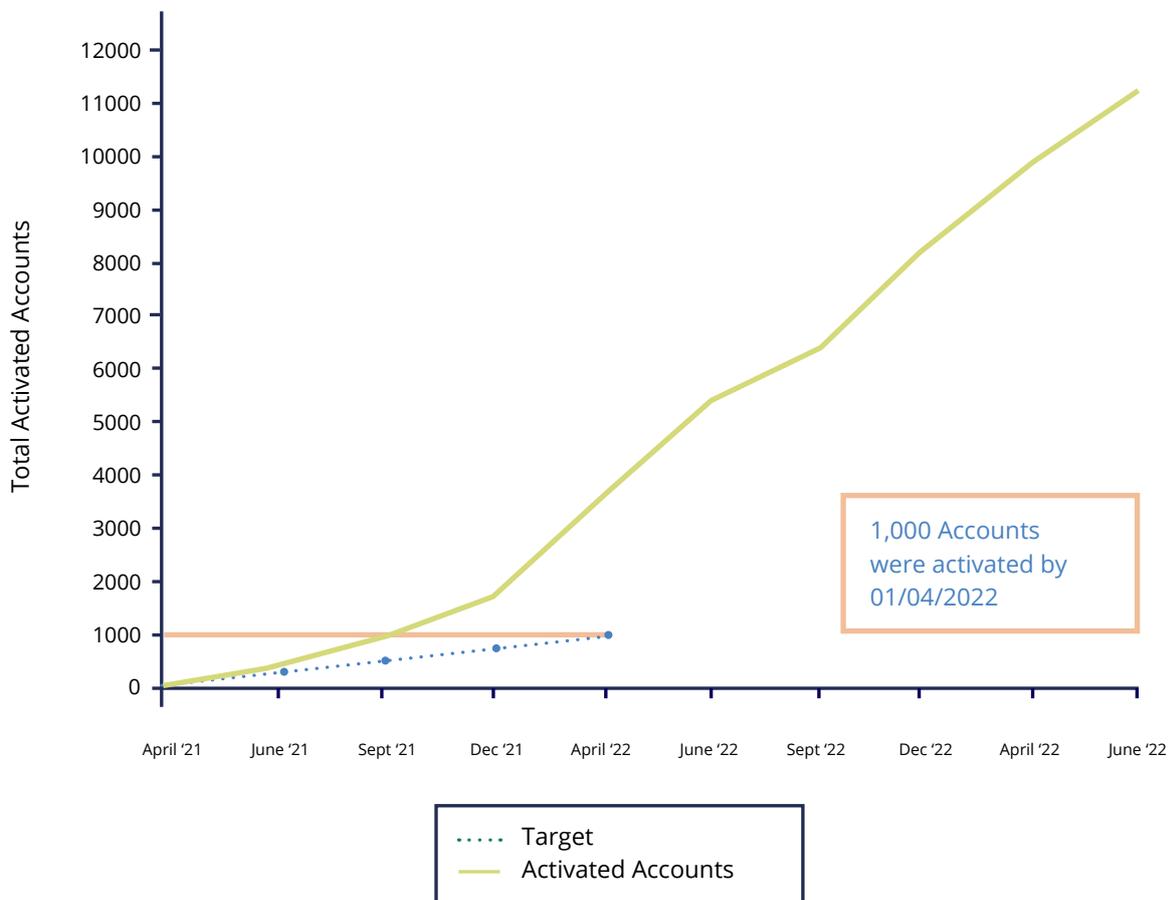
# Milestone

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 1,000 activated accounts by the end of the fourth quarter in April 2022.

As seen in Figure 1 below, these targets were met and exceeded each quarter, with the overall target of 1,000 activated accounts 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.

In November 2022, the HSE and SilverCloud entered a long-term partnership to formally deliver and extend the national digital CBT service for all adults in Ireland.



**Figure 1.** Account activations from from April 2021 to June 2023. As of June 15th 2023, there have been 12,383 account activations.

# 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 SilverCloud website, 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 to navigate to the SilverCloud platform where they can proceed to create and activate their account.

## Referral Sources

Consistent with the pattern that has been observed in previous reports, general practitioners (GPs) remain the source of the most referrals, constituting 89.8% of the total 18,444 referrals (as of June 15th 2023). Primary Care Psychology has been the next highest source of referrals with 3.4%. Further information about the breakdown of referrals across each referral source is provided in Table 1. There continues to be substantial variability in the number of referrals made by referring clinicians, with several clinicians within each referral source having made only one referral while others have made up to 227 referrals. Primary Care Psychology has the highest average number of referrals per referring clinician at 6.2.

**Table 1.** Mean, median, and range of total referrals made by each referring clinician across each referral source.

Referring Group	Total Referrals	Total Referrers	Min to Max	Mean (SD)	Median (IQR)
General Practitioners	16,559	2,318	1 - 227	7.1 (13.3)	2 (1-8)
Counselling Primary Care	517	69	1 - 125	7.5 (18.3)	2 (1-4)
Primary Care Psychology	632	83	1 - 139	7.6 (17.9)	3 (1-6)
Jigsaw	265	64	1 - 45	4.1 (7.1)	2 (1-4)
Community Mental Health	471	112	1 - 59	4.2 (7.5)	2 (1-4)
Total	18,444	2646	1-227	7.0 (13.3)	2 (1-7)

**Note:** SD = Standard Deviation, IQR = Interquartile Range

## Activation Rates

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

The activation rates across each referral source are presented in Table 2. The activation rates range from 61.1% to 68.5%, with Counselling in Primary Care accounting for the highest activation rate. These activation rates are generally comparable to similar nation-wide digital CBT initiatives in the United Kingdom (UK), where average activation rates of 65% have been reported for similar referral sources within the National Health Service (NHS).

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

Referral Group	Total Referrals Sent	Total Accounts Activated	Activation Rate (%)
General Practitioners	16,559	11,135	67.2
Counselling Primary Care	517	354	68.5
Primary Care Psychology	632	432	68.4
Jigsaw	265	164	61.2
Community Mental Health	471	297	63.1
Total	18,444	12,383	64.6

## Summary

- The number of referrals and account activations have been increasing steadily, indicating a good uptake and demand for the service among both referring clinicians and their patients.
- 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 68.5% for Counselling Primary Care to a low of 61.2% for Jigsaw, suggesting that there is likely room for improvement with the latter group.

# User Demographics and Baseline Information

Service users' demographic information is presented in Table 3. Users have been primarily female, white Irish, well-educated, and aged between 18-44 years, with the age groups in this range collectively accounting for 75.7% of the sample. There is opportunity to drive awareness of this digital support with the male demographic, this can be achieved firstly with clinician education on recognising the application for male patients and secondly by driving wider public awareness of the support. In addition, there is opportunity to support the wider ethnicity demographic in Ireland that represent roughly 14% of the total users in this report.

**Table 3.** Baseline Demographics.

		n	%
Age	18-24	11,135	67.2
	25-34	354	68.5
	35-44	432	68.4
	45-54	164	61.2
	55-64	297	63.1
	64+	297	63.1
Gender	Female	8,446	71.7
	Male	3,243	27.5
	Other/Prefer not to say	85	0.7
Education	College/University	5,885	51.1
	Postgraduate Masters/Doctorate	1,453	12.6
	Secondary Education	3,918	34.0
	Primary Education	1,266	2.3
Ethnicity	White Irish	10,065	85.7
	Other White European	1,048	8.9
	Mixed	113	1.0
	Asian	106	0.9
	Black	117	1.0
	Latino	77	0.7
	Indian	56	0.5
	Arab	32	0.3
	Other	129	1.1

The observed distributions for education levels and ethnicity are consistent with the demographics of the general population of Ireland. However, the imbalance in the proportion of female and male users, and the low representation of older adults does not reflect the population demographics of Ireland, whereby the female:male ratio is almost 1:1, and adults over the age of 65 comprise 15% of the Irish population (CSO.ie). Unfortunately, there has been no change in the representation of either males or older adults since these imbalances were first reported in 2021.

It is possible that these imbalances are 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 not be excluded. It also worth considering whether greater uptake in these cohorts could be facilitated by more targeted awareness campaigns.

During the account activation process users are also asked to 1) indicate whether they have been prescribed any psychiatric medication; and 2) rate how likely they think SilverCloud would work for them. The responses to these questions are summarised in Table 4. Over half (60.3%) of the service users have reported that they have been prescribed medication, of whom 7.4% report that they are not taking the prescribed medication.

Overall, there was a positive expectation regarding the benefits that users believe they will gain from the programme, with a total of 90% 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.** Medication status and expectations regarding SilverCloud Digital CBT.

		n	(%)
Medication	Not prescribed	2,312	39.8
	Prescribed and taking	3,072	52.9
	Prescribed but not taking	427	7.4
Expectations	Extremely likely	349	3.0
	Very likely	2,585	22.5
	Somewhat likely	7,520	65.3
	Not very likely	950	8.3
	Not at all likely	109	0.9

The distribution of the counties of residence of service users is provided in Figure 3. The largest proportion of users reside in Dublin (n = 3781). The counties with the least number of users are Monaghan (n=56), Leitrim (n=58) and Longford (n=65).

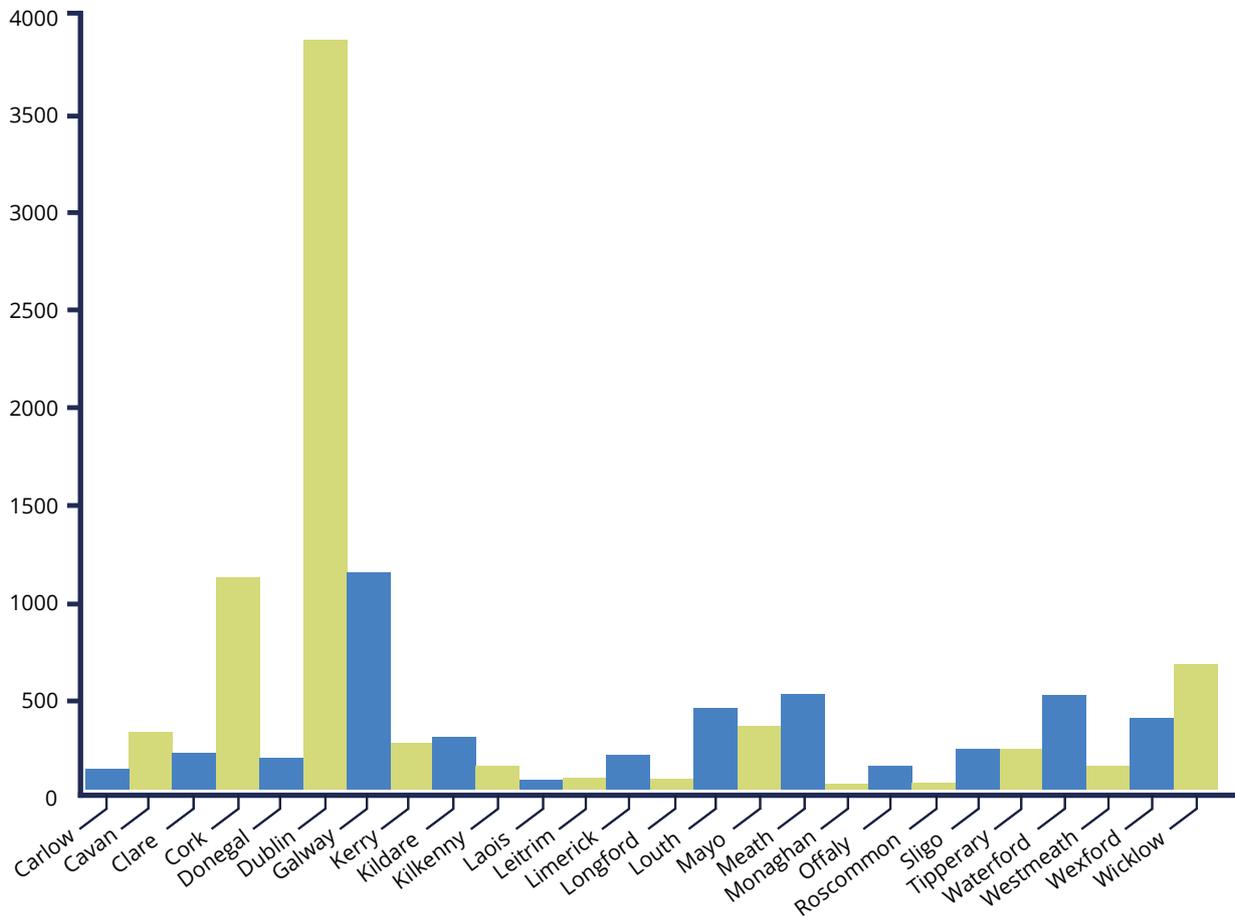
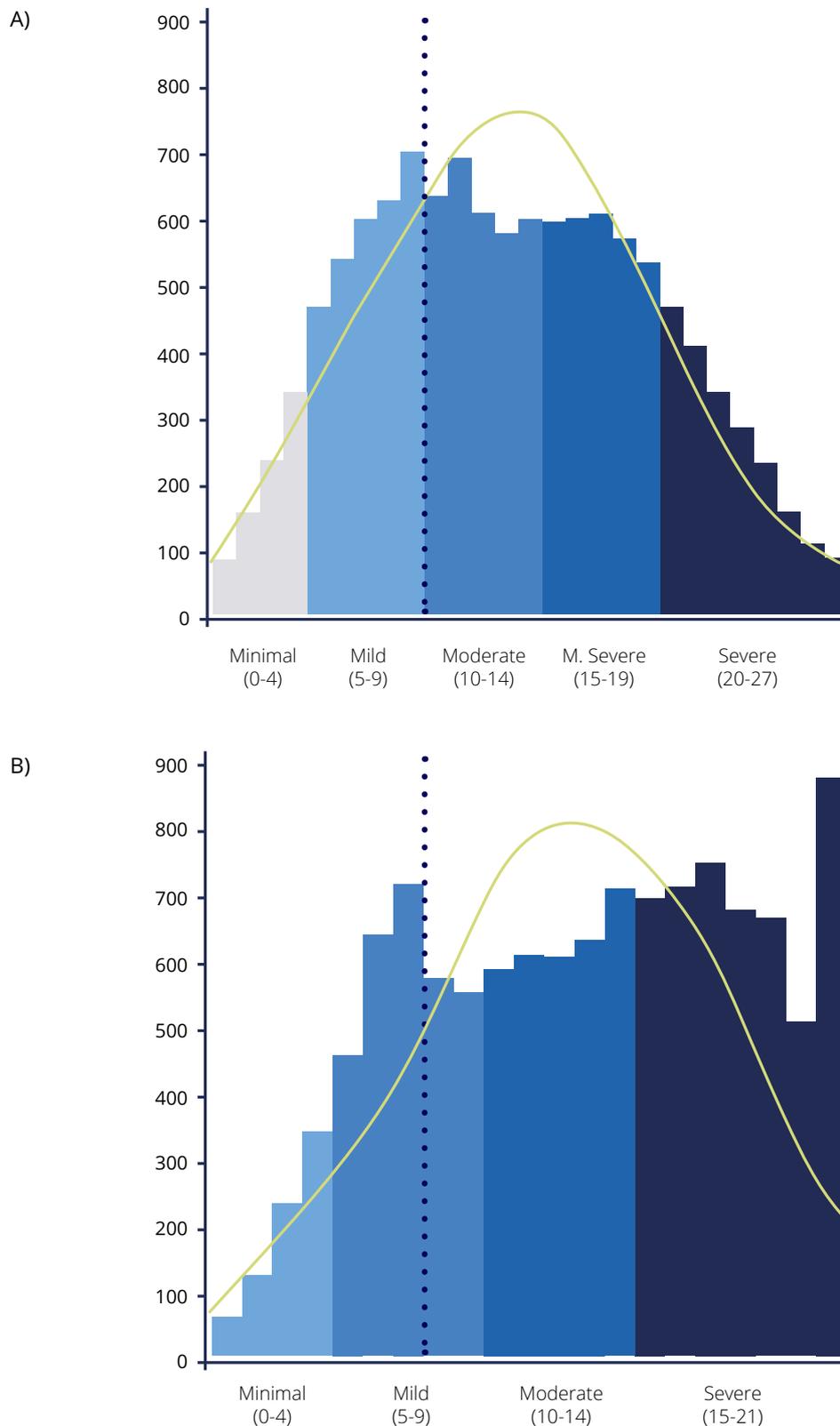


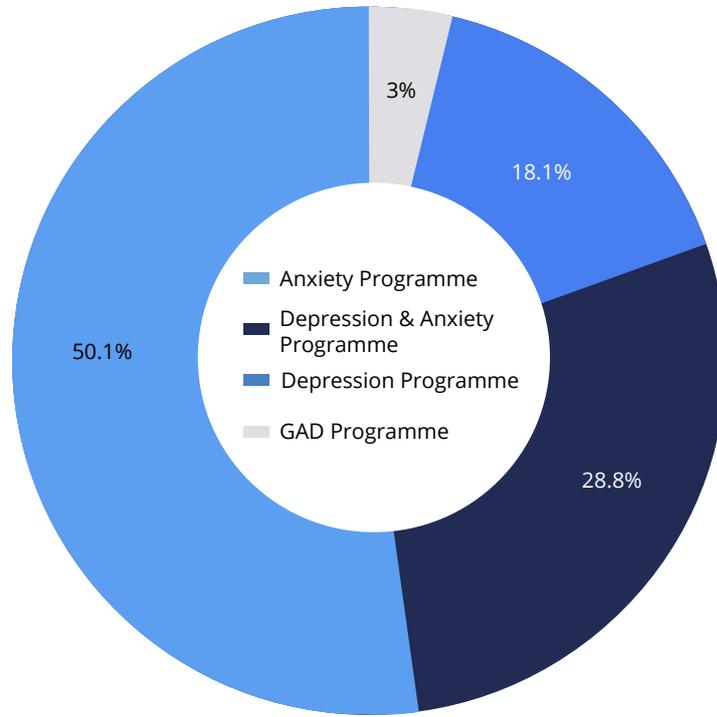
Figure 2. Distribution of counties of residence of the sample.

Most service users also completed the PHQ-9 (94.2%; 11767/12383) and GAD-7 (94.3%; 11680/12383 ) at baseline. The distributions of users baseline scores on these measures are shown in Figure 3. A total of 67.8% (8082/11767) of users met the criteria for clinical levels of depression (>9 PHQ-9), 78.7% (9194/11680) had clinical levels of anxiety (>7 GAD-7). A total of 62.4% (7286/11680) of users met the criteria for clinical levels of both depression and anxiety, while 6.2% (729/11680) did not have clinical levels of either depression or anxiety.



**Figure 3.** Baseline levels of depression and anxiety as measured by the PHQ-9 (A), GAD-7 (B), respectively. The dashed lines indicate the threshold for 'caseness' (i.e. clinical levels of symptoms) for each measure.

The most used programme continues to be 'Space from Anxiety' (see Figure 4). This observation is consistent with the observed prevalence of moderate-to-severe anxiety reported by users. However, it is worth noting that the overall prevalence of comorbid anxiety and depression is higher (62.4%) than anxiety-only cases (16.3%; 19088/11690). As such, it is worth considering whether greater uptake of the comorbid programme, Space from Anxiety and Depression, for service users with clinical levels of both anxiety and depression symptoms may result in better outcomes for this group.



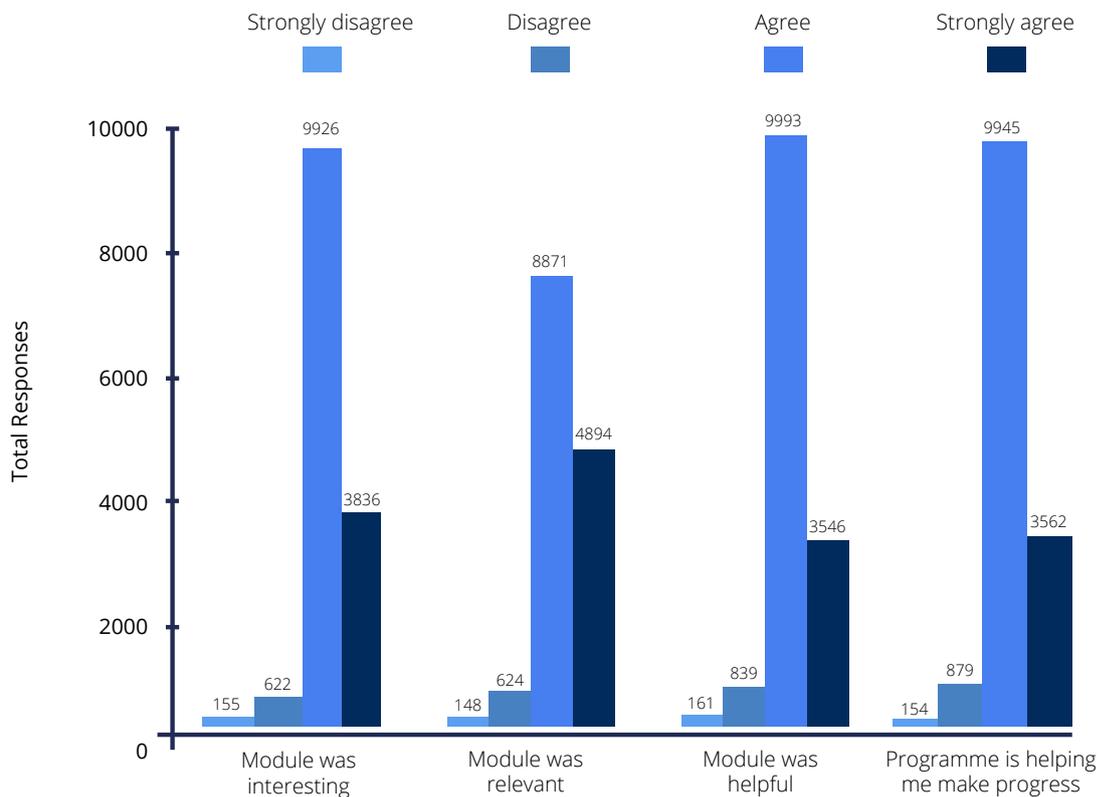
**Figure 4.** The proportions of service users assigned to each of the SilverCloud CBT programmes.

## Summary

- There has been no change in the proportions of male and older adult representation since these gender and age imbalances were initially reported.
- While it should be acknowledged that these persisting imbalances may be a direct reflection of higher proportions of help-seeking in females and younger adults, the possibility that this pattern reflects a bias among clinicians should also be explored.
- Overall, users have reported positive expectations about their potential to benefit from the digital CBT programmes.
- A small proportion of service users do not meet the criteria for clinical levels of either depression or anxiety (6.2%) at baseline. On the other hand, 62.4% of service users meet the criteria for clinical levels of both depression and anxiety.
- The observation that only 28.2% of users have been assigned the comorbid programme despite 62.4% of service users meeting the criteria for comorbid depression and anxiety suggests that this programme may be underutilised.

# User Satisfaction

There have been a total of 58,141 module ratings across all module evaluation questionnaires to date. The overall user satisfaction rating is 94.1% (percentage of all the ratings that were marked as “agree” or “strongly agree”). More specifically, 94.7% have agreed that the modules were interesting, 94.7% have agreed that the modules were relevant, 93.1% have agreed the modules were helpful, and 93% have agreed the program is helping them make progress. Figure 5. displays the breakdown of ratings across all module questionnaire responses.



**Figure 5.** User Satisfaction Ratings. 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 module evaluation questionnaire entirely.

# Status of Accounts

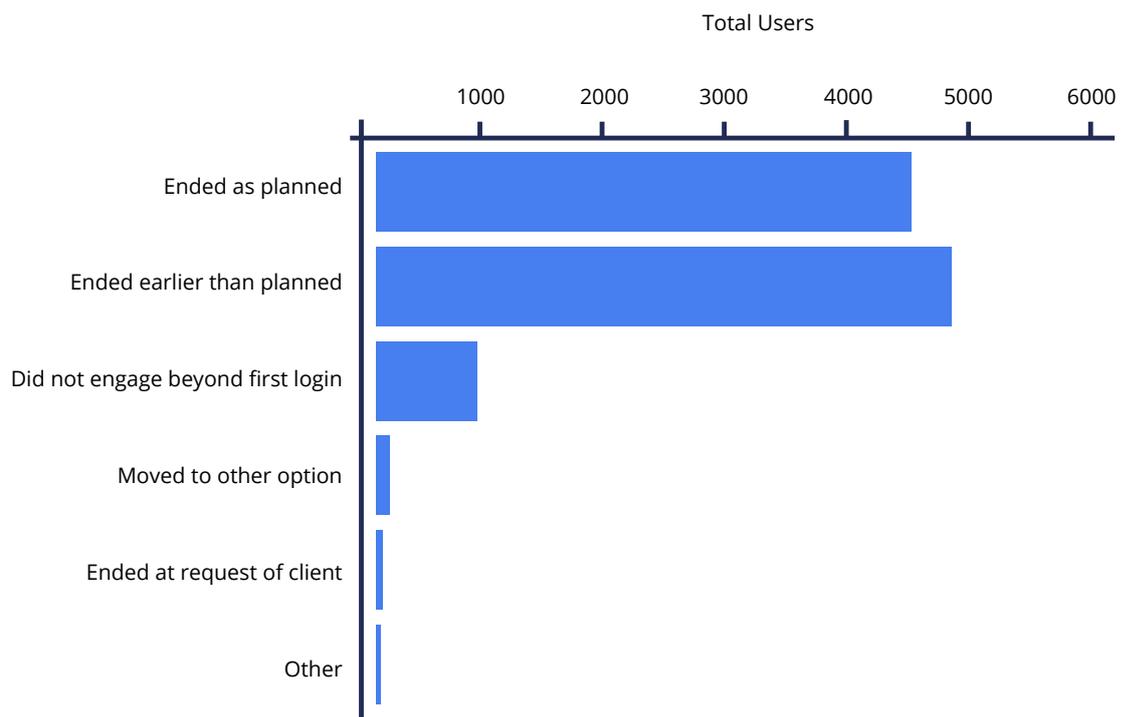
A breakdown of the status of accounts as of June 15th, 2023 is presented in Table 5. Of the 64.6% (n=12,383) of users who activated an account, 91.5% (n=11,325) have either been marked as completed (n=10,438) or are currently in treatment (n=887). The accounts for the remaining 8.5% are either pending (i.e. user has not yet finished the sign-up process), deleted (i.e. user has requested for their account to be deleted), excluded (i.e. client has been excluded due to risk), paused or unsuitable.

**Table 5.** Status of accounts

Completed	Current	Deleted	Excluded	Paused	Pending	Unsuitable
10,438 (84.3%)	887 (7.2%)	13 (0.1%)	84 (0.7%)	7 (0.1%)	801 (6.5%)	152 (1%)

Accounts that are marked as Completed (n = 10,438) can be assigned different reasons for completion (see Figure 6). 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 follow-up 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 6.** Summary of the reasons users' accounts were marked as completed.

# Programme Completers

The remaining section of the report focuses on the subset of users who met the criteria for 'Ending as planned,' (n=4,476), all of whom have completed both baseline and follow-up clinical assessments.

## Programme Usage

Data relating to engagement and use of the platform is presented in Table 6. There is considerable variability across users in terms of their number of logins and time spent on the platform.

Similar to the patterns observed in previous milestone reports, the data on programme usage suggests a high level of engagement with the service. The average number of logins and number of reviews received are higher than those reported in IAPT services in the United Kingdom (Richards et al., 2020) and comparable with those reported in Mindspot, a world-leading national digital CBT service that has been implemented in Australia (Battersby et al., 2020).

Table 6. Engagement and use of the platform.

	Mean (SD)	Median (IQR)	Min-Max
No. of Logins	24.8 (30.0)	17.0 (10-29)	2-701.0
No. of Reviews	6.9 (1.1)	6.0 (6-8)	4-13.0
Time Spent (mins)	296.5 (488.7)	181.5 (89.6-347.7)	6-15646.4
Avg Time per Session (mins)	12.2 (8.6)	10.2 (6.4-15.6)	1-159.3

## Intervention-related Improvements

As explained in previous reports, it is important to distinguish between those who present with minimal-to-mild versus moderate-to-severe symptoms. For example, '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 these users also 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 7).

Table 7. Improvement rates for users with minimal and mild severity at baseline

	Baseline Severity	Improvement rate
PHQ-9	Minimal	108/290 (37.2%)
	Mild	703/1112 (63.2%)
GAD-7	Minimal	138/218 (63.3%)
	Mild	711/1,056 (67.3%)

## Reliable Improvement and recovery rates

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

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. below these thresholds) post-intervention.

A user meets the criteria for reliable improvement when they show a decrease of at least 5-points on the PHQ-9 scale or at least 4-points on the GAD-7 scale from pre- to post-treatment.

Overall, the total proportion of users achieving reliable improvement in either depression or anxiety was 54%. The total proportion of users that transitioned to recovery in either depression or anxiety was 48%. The rates of reliable improvement and recovery for each severity level on each measure are shown in Table 8.

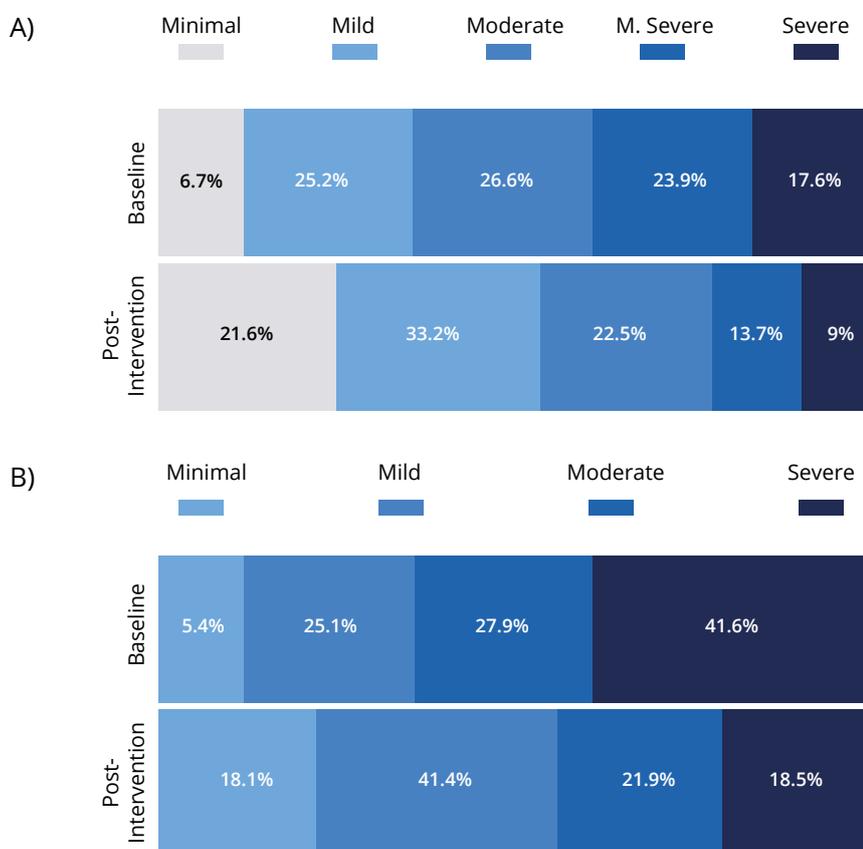
Consistent with the patterns typically reported in the published literature on these metrics, rates of reliable improvement increase with higher levels of baseline severity, with the highest rates of reliable improvement being observed in users who had severe levels of depression and anxiety at baseline. In contrast, rates of recovery decrease as baseline severity increases, as users need a higher magnitude of change to reach the threshold for recovery.

**Table 8.** Reliable improvement and recovery rates for users that had at least moderate levels of depression or anxiety at baseline

	Baseline Severity	Reliable Improvement (n) (%)	Recovery (n) (%)
PHQ-9	Moderate	443/1,188 (37.3%)	670/1,188 (56.4%)
	Moderately Severe	575/1,057 (56.4%)	393/1,057 (37.2%)
	Severe	453/784 (57.8%)	145/784 (18.5%)
GAD-7	Moderate	648/1,173 (55.2%)	569/1,173 (48.5%)
	Severe	1,080/1,750 (61.7%)	462/1,750 (26.4%)

Pre- to post-intervention changes in the proportions of users in each severity category for depression and anxiety are presented in Figure 7. In line with what we would hope to see, there is a clear reduction in the proportion of users in the higher levels of symptom severity, and an increase in the proportion of users in the minimal and mild categories.

Overall, rates of reliable deterioration from baseline to post-intervention as measured by the PHQ-9 and GAD-7 have also been very low. For the PHQ-9 the rate of reliable deterioration is 4.3%, and for the GAD-7 the rate is 5.15%.



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

## Sub-group Analyses

Subgroup analyses explored any potential differences across gender and age groups on clinical outcomes. Statistically significant improvements on the PHQ-9 and GAD-7 are evident across all age levels, and independent of whether someone identifies as male or female (see Table 9).

However, for the those who report 'Other/Prefer not to say' for gender, there is no significant improvement on the GAD-7. This observation suggests that more tailored support for this cohort should be considered.

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

PHQ-9		Baseline	Post-Intervention	p-value	Cohen's d
Age	18-24	14.664	11.934	<.001	0.440
	25-34	13.793	9.988	<.01	0.615
	35-44	12.769	9.379	<.001	0.539
	45-54	11.960	8.813	<.001	0.511
	55-64	11.979	8.968	<.001	0.488
	65+	8.716	6.602	<.001	0.409
Gender	Female	13.311	9.943	<.001	0.535
	Male	12.615	9.943	<.01	0.470
	Other	16.833	13.600	<.01	0.539
GAD-7		Baseline	Post-Intervention	p-value	Cohen's d
Age	18-24	13.896	11.228	<.001	0.539
	25-34	13.538	10.018	<.01	0.755
	35-44	12.703	9.452	<.001	0.711
	45-54	11.317	8.722	<.001	0.593
	55-64	10.903	8.449	<.001	0.558
	65+	9.297	7.076	<.001	0.613
Gender	Female	12.932	9.387	<.001	0.639
	Male	12.124	8.775	<.001	0.626
	Other	13.100	11.929	0.859	0.223

## Summary

- The user satisfaction rating continues to be very high at 94%
- A large proportion of users are not completing a follow-up assessment and therefore not meeting the criteria for 'Ended as planned.' Clinical outcomes also cannot be calculated for these users.
- Strategies to improve assessment completion rates should be considered. One revision that could prove favourable in this regard might be change the time that users are asked to complete the first follow-up assessment from week four to week 2.
- For programme completers, the total proportion of users that achieved reliable improvement in either depression or anxiety was 54%. The total proportion of users that transitioned to recovery in either depression or anxiety was 48%. 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.
- It is encouraging to see that the programmes are effective irrespective of age and irrespective of whether one identifies as male or female.
- Users who report 'Other/Prefer not to say' for gender are not demonstrating significant improvements in their anxiety symptoms. This observation warrants consideration of whether more tailored could be provided for this particular cohort.

# Service Development Highlights

The following subsections of the report provide summaries of three changes to the HSE digital CBT service that have been implemented since the last milestone report.

## Sexual Orientation

In March 2023, a question on sexual orientation was added to the demographics questionnaire. This question was added on the basis that understanding and embracing the full diversity of service users' sexual orientation will allow for better insights regarding how to address LGBTQ mental health disparities.

Since this question was added, 2,115 users have responded to the question. The most commonly reported sexual orientation is 'heterosexual or straight' (87.2%; 1,844/2,115). The second most common is bisexual (6.1%; 130/2,115), followed by 'Gay or lesbian' (4.2%; 89/2,115) and other (2.5% 52/2,115).

Of the 2,115 users who responded to this question, 400 users have been marked as 'completed'. A breakdown of the baseline and post-intervention symptom scores for each sexual orientation in this group of users is presented in Table 10.

**Table 10.** Baseline and post-intervention symptom scores, and associated p-values and effect sizes on the PHQ-9 and GAD-7 for each sexual orientation.

PHQ-9	Baseline	Post-Intervention	p-value	Cohen's d
Heterosexual (n=343)	12.942	9.306	<.001	0.635
Bisexual (n=32)	15.250	11.688	<.001	0.721
Gay or lesbian (n=17)	15.588	10.176	<.001	1.074
Other (n=8)	17.000	13.875	0.180	0.526
GAD-7	Baseline	Post-Intervention	p-value	Cohen's d
Heterosexual (n=343)	12.523	8.956	<.001	0.671
Bisexual (n=32)	12.563	10.167	<.01	0.527
Gay or lesbian (n=17)	13.412	9.667	<.01	0.631
Other (n=8)	13.500	12.571	0.217	0.423

Statistically significant improvements on the PHQ-9 and GAD-7 have been observed for each sexual orientation, except for those who report 'Other.'

It is, however, essential to note that the volume of programme completers who have responses to the sexual orientation question remains relatively small to date. In particular, only 8 people have reported 'Other.' Therefore, we do not currently have sufficient statistical power to detect intervention-related changes for this particular subgroup. As such it would be inappropriate to draw any conclusions before more data from this question has been acquired.

## **Work, Productivity, Activity and Impairment**

In March 2023, the Work, Productivity, Activity and Impairment (WPAI) questionnaire was added to the baseline assessment that users complete during the account activation process. Users are also being asked to complete this questionnaire again every 4 weeks. This questionnaire asks users to self-report on the impact that their depression and/or anxiety has on work-related outcomes (WRO) such as absenteeism, presenteeism, overall work performance, as well as non-work activities over the previous 7 days.

This inclusion of this questionnaire was motivated by the knowledge that depression and anxiety can incur substantial indirect costs associated with reduced work functioning, including impaired productivity, absences and decreased job retention. Acquiring data on the relationship between symptom severity and work-related outcomes, as well as the extent to which engaging with the SilverCloud CBT programmes might affect these outcomes, will allow for a more comprehensive evaluation of the impact of the HSE digital CBT service.

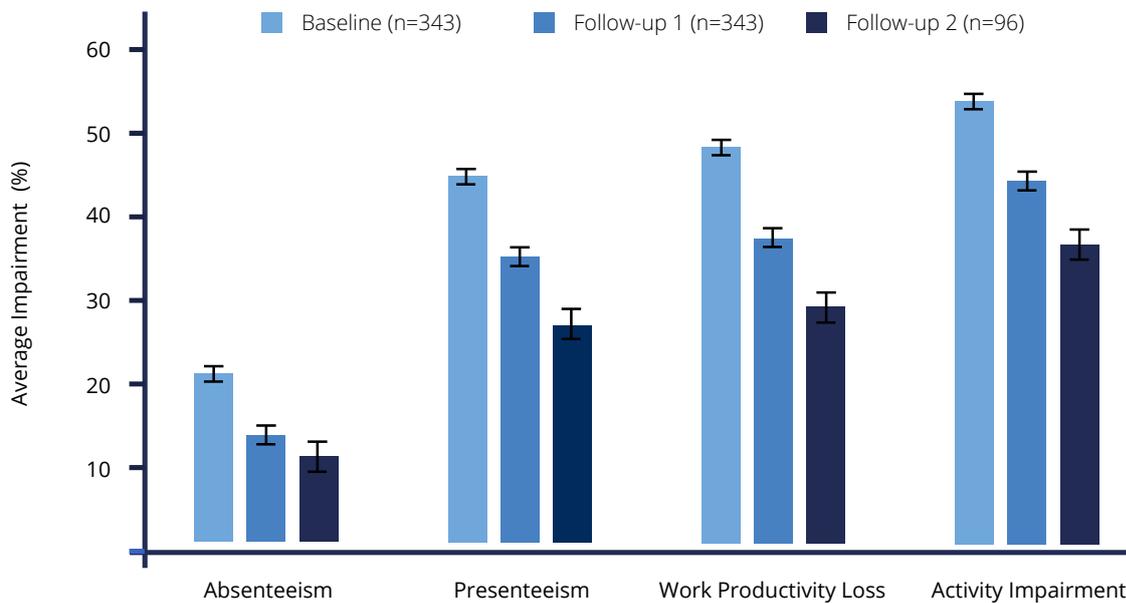
The WPAI yields four primary work-related outcome measures: 1) Absenteeism (work time missed); 2) Presenteeism (reduced effectiveness while at work); 3) Work productivity loss (overall absenteeism and presenteeism); 4) Activity impairment (impact on non-work activities). Each measure is reported as a percentage. For instance, a presenteeism score of 40% indicates that 40% of time spent at work was impaired. The questionnaire and guidelines for scoring responses are available at: [http://www.reillyassociates.net/WPAI\\_Scoring.html](http://www.reillyassociates.net/WPAI_Scoring.html)

Since its inclusion, 2082 service users have completed the WPAI questionnaire at baseline. 936 of these users have completed a follow-up WPAI assessment, and a further 181 of these users have completed a second follow-up. However, only the data of those who answered affirmatively to the question "Are you currently employed (working for pay)?" were analysed.

The baseline and follow-up scores for the four WPAI outcomes and the corresponding sample sizes are presented in Table 11 and Figure 8. There were significant reductions in each outcome measure from baseline to follow-up 1 (all  $p < .001$ ). The effect sizes for these reductions were relatively small (Cohen's  $d = 0.22-0.39$ ). There were also significant reductions in presenteeism, work productivity loss, and activity impairment from baseline to follow-up 2 (all  $p < .01$ ); however the reduction in absenteeism did not reach the threshold for significance ( $p = .068$ ). This may be partially attributable to comparatively smaller sample size and greater inter-individual variability in this outcome at follow-up 2.

**Table 11.** Baseline and follow-up scores for the WPAI outcomes

	Baseline (n=1273)	Follow-up 1 (n=343)	Follow-up 2 (n=96)
Absenteeism	20.36% (25.38)	13.25% (29.65)	10.60% (34.31)
Presenteeism	43.77% (24.09)	35.53% (27.26)	27.11% (27.30)
Work Productivity Loss	48.23% (26.80)	38.00% (28.71)	30.89% (28.86)
Activity Impairment	52.96% (27.62)	44.05% (28.24)	38.82% (26.98)



**Figure 8.** Outcomes at baseline and follow-up as measured by the Work Productivity Activity and Impairment (WPAI) questionnaire.

It was also interesting to examine whether there was any correspondence between the changes in WPAI outcomes from Baseline to Follow-up 1 and the clinical outcome measures. As such difference scores (Baseline – Follow-up 1) for each WPAI outcome measure were calculated and correlated with the difference scores for the PHQ-9 and GAD-7. The results of these correlation analyses are presented in Table 12.

Changes in symptoms as measured by both the PHQ-9 and GAD-7 were positively associated with the changes in each of the WPAI outcomes. This observation is consistent with the well-documented relationship between depression and anxiety and decreased work productivity (McDaid, Park, & Wahlbeck, 2019). These findings additionally demonstrate how SilverCloud CBT programmes can indirectly benefit work-related outcomes such as absenteeism, presenteeism and overall work-productivity, beyond the primary clinical outcomes.

That said, the sample size available for these work-related outcomes analyses is still relatively small so it will be important to determine whether these relationships hold up when more follow-up WPAI data has been acquired.

**Table 12.** Pearson's *r* and associated *p*-values for the relationships between changes in PHQ-9 and GAD-7 scores and changes in the WPAI outcomes from Baseline to Follow-up 1

	PHQ9 ( <i>r</i> )	<i>p</i>	GAD-7 ( <i>r</i> )	<i>p</i>
Absenteeism	0.203	<.05	0.201	<.05
Presenteeism	0.315	<.001	0.241	<.01
Work Productivity Loss	0.365	<.001	0.320	<.001
Activity Impairment	0.400	<.001	0.218	<.01

## Update to the Client's Choice Pathway

Referring clinicians have the option of referring their clients to the SilverCloud platform, as opposed to referring them to a specific SilverCloud programme. This is referred to as the Client's Choice pathway, as these clients are subsequently required to make their own decision about which programme they proceed with.

Within the HSE service, 34% of users to date have been referred to the platform (Client's choice pathway) as opposed to a specific programme. Users on the Client's Choice pathway are presented with summaries of their PHQ-9 and GAD-7 scores and then presented with the option of selecting a programme.

For the HSE digital CBT service, the programme options on the client's choice pathway have been limited to Space from Depression and Space from Anxiety to date. However, following the observation that a large proportion of users who meet the criteria for both depression and anxiety are not on the Space from Anxiety and Depression programme it has been decided that this programme should be added to the list of options for users on the Client's Choice pathway.

In the next milestone report, the impact of this change will be evaluated.

# Concluding Recommendations

Overall, the findings from this milestone report are broadly consistent with previous reports, and continue to demonstrate the success of the HSE's digital CBT service. SilverCloud's recommendations for consideration are as follows:

- The clinician education and promotion strategies discussed at the workshop in May of this year need to be acted on to enable better understanding and uptake of the service amongst clinicians and their respective patients and clients.
- The persisting discrepancy in the proportions of male versus female users, highlights the need to develop awareness about the availability and potential benefits of the digital CBT service for males.
- Introducing a self-signup pathway may also help reduce this gender discrepancy, as males may be more likely to perceive stigma as a barrier to seeking help for depression and anxiety.
- Older adults continue to only represent 2.3% of the service user population. Since the subgroup analyses have confirmed that older age groups experience significant benefits from the programmes, efforts to increase awareness about this observation could be worthwhile.
- 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.
- A large proportion of users are not completing a follow-up assessment. This limits the extent to which the impact of the service can be evaluated. One strategy to consider for increasing assessment completion rate may be to reduce the interval between the baseline assessment and the first follow-up assessment.
- Preliminary analysis of the data on sexual orientation that is available to date provides reason to be optimistic that the service is providing effective support for individuals across each sexual orientation category. However, it will be important to monitor the clinical outcomes for the subgroup that report "other" for their sexual orientation when sufficient data on this group has been acquired.

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## 'Anxiety Programme' Descriptor

The Anxiety Programme 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, the Anxiety Programme 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 Anxiety Programme has been developed to help service users to manage these feelings and the causes of them, ultimately offering welcome space from anxiety.

The Anxiety Programme consists of 7 modules whose structure and content follow evidence-based principles of traditional, face-to-face, Cognitive Behaviour 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 Behaviour 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 behaviours (Beck, 2005). Reference is made from the start of the program to the use of the thought, feeling and behaviour 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.

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

**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 behaviours, behaviours 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 behavioural 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-Behaviour 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, behaviour, thoughts, physical reactions and outcomes. This thought, feelings and behaviour (TFB) cycle is a modified version of Ellis' antecedent, behaviour and consequence (ABC) model used in Rational Emotive Behavioural Therapy (REBT, Ellis, 1962, 2001).

### Cognitive Behavioural 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).

### Behaviour Experiments

Using adjunctive behaviour 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 (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).

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

Module	Topics	Goals	Activities
Getting Started	<ul style="list-style-type: none"> <li>• Psychoeducation about anxiety</li> <li>• Applying CBT to anxiety</li> <li>• The TFB Cycle</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <li>• Improve understanding of anxiety</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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Avoidance and why it should be avoided</li> <li>• Safety behaviours</li> <li>• Graded exposure</li> <li>• Personal Stories</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Facing Your Fears Quiz</li> <li>• My Safety Behaviours</li> <li>• Facing Your Fears</li> </ul>
Spotting Thoughts	<ul style="list-style-type: none"> <li>• Automatic thoughts and mood</li> <li>• Thinking traps</li> <li>• Catching unhelpful thoughts</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Me &amp; My Thoughts Quiz</li> <li>• The TFB Cycle</li> <li>• Staying in the Present (Watching Thoughts)</li> </ul>
Challenging Thoughts	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>

# 'Depression Programme' Descriptor

The 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 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 core beliefs.

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

Module	Topics	Goals	Activities
<b>Getting Started</b>	<ul style="list-style-type: none"> <li>• Psychoeducation regarding depression</li> <li>• Applying CBT to depression</li> <li>• The TFB Cycle</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <li>• Improve understanding of depression</li> <li>• Introduce the TFB Cycle</li> <li>• Learn about the role of thoughts, feelings and behaviours in depression</li> <li>• Learn about CBT</li> <li>• Connect with the present moment</li> </ul>	<ul style="list-style-type: none"> <li>• Depression Myths &amp; Facts Quiz</li> <li>• Understanding My Situation</li> <li>• Mood Monitor</li> <li>• Staying in the Present (Breathe)</li> </ul>
<b>Understanding Feelings</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 depression and well-being</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Boosting Behaviour</b>	<ul style="list-style-type: none"> <li>• Psychoeducation regarding the role of behaviour in boosting mood</li> <li>• Behavioural 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>• Changing physical body reactions to improve mood</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about the link between mood and behaviours</li> <li>• Improve knowledge of common behavioural traps and how to beat them</li> <li>• Learn tips on how to get motivated during periods of low mood</li> <li>• Recognise 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 style="list-style-type: none"> <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>
<b>Spotting Thoughts</b>	<ul style="list-style-type: none"> <li>• Automatic thoughts and mood</li> <li>• Thinking traps</li> <li>• Catching unhelpful thoughts</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about the role of thoughts in depression within the TFB Cycle</li> <li>• Recognise negative automatic thoughts</li> <li>• Understand and recognise thinking traps</li> </ul>	<ul style="list-style-type: none"> <li>• Me &amp; My Thoughts Quiz</li> <li>• The TFB Cycle</li> <li>• Staying in the Present (Watching Thoughts)</li> </ul>
<b>Challenging Thoughts</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>

# 'Depression & Anxiety Programme' Descriptor

## Programme Modules

### Getting Started

This module introduces the user to Cognitive Behavioural 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 behavioural 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 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 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.

Table: Space from Comorbid: Depression and Anxiety program – modules, topics, goals and activities

Module	Topics	Goals	Activities
<b>Getting Started</b>	<ul style="list-style-type: none"> <li>• Introduction of CBT model</li> <li>• The CBT Cycle</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <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 behaviours affect each other</li> <li>• Connect with the present moment</li> </ul>	<ul style="list-style-type: none"> <li>• Mood Monitor</li> <li>• My CBT Cycles</li> <li>• Staying in the Present (Breathe)</li> </ul>
<b>Understanding Depression &amp; Anxiety</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Improve understanding of depression</li> <li>• Learn about the role of thoughts, emotions, physical sensations and behaviours in depression</li> <li>• Facilitate users to reflect on their own personal circumstances</li> </ul>	<ul style="list-style-type: none"> <li>• Myths &amp; Facts Quiz</li> <li>• Understanding My Situation</li> <li>• Staying in the Present (Body Scan)</li> </ul>
<b>Managing Worry</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Anxious Thoughts &amp; Worry Quiz</li> <li>• My Worries</li> <li>• Worry Tree</li> <li>• Staying in the Present (Breathe)</li> </ul>
<b>Noticing Feelings</b>	<ul style="list-style-type: none"> <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 sensations to improve mood</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about emotions and their role in the CBT Cycle</li> <li>• Recognise emotions that are difficult to cope with</li> <li>• Recognise 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 style="list-style-type: none"> <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>
<b>Boosting Behaviour</b>	<ul style="list-style-type: none"> <li>• Psychoeducation about mood boosting behaviours</li> <li>• Behavioural 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 style="list-style-type: none"> <li>• Learn about the link between mood and behaviours</li> <li>• Improve knowledge of common behavioural traps and how to beat them</li> <li>• Learn tips on how to get motivated during periods of low mood</li> <li>• Recognise the importance of pleasurable activities and achievements in boosting mood</li> </ul>	<ul style="list-style-type: none"> <li>• Mood &amp; Behaviour 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>
<b>Spotting Thoughts</b>	<ul style="list-style-type: none"> <li>• Automatic thoughts and mood</li> <li>• Thinking traps</li> <li>• Catching unhelpful thoughts</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about the role of thoughts in depression and anxiety within the CBT Cycle</li> <li>• Recognise negative automatic thoughts</li> <li>• Understand and recognise thinking traps</li> </ul>	<ul style="list-style-type: none"> <li>• Me &amp; My Thoughts Quiz</li> <li>• My CBT Cycles</li> <li>• Staying in the Present (Watching Thoughts)</li> </ul>

Module	Topics	Goals	Activities
<b>Challenging Thoughts</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Managing Worry</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Anxious Thoughts &amp; Worry Quiz</li> <li>• My Worries</li> <li>• Worry Tree</li> <li>• Staying in the Present (Breathe)</li> </ul>
<b>Core Beliefs (Unlockable)</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Improve understanding of core beliefs and where they come from</li> <li>• Improve knowledge on how to recognise 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 style="list-style-type: none"> <li>• Core Beliefs Quiz Core Beliefs (Identifying, challenging, balancing, and strengthening)</li> </ul>
<b>Facing Your Fears (Unlockable)</b>	<ul style="list-style-type: none"> <li>• Avoidance and why it should be avoided</li> <li>• Safety behaviours</li> <li>• Graded exposure</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Facing Your Fears Quiz</li> <li>• My Safety Behaviours</li> <li>• Facing Your Fears</li> </ul>
<b>Bringing it All Together</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>

# 'GAD Programme' 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 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 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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Automatic thoughts and mood</li> <li>• Thinking traps</li> <li>• Catching unhelpful thoughts</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Me &amp; My Thoughts Quiz</li> <li>• The TFB Cycle</li> <li>• Staying in the Present (Watching Thoughts)</li> </ul>
Challenging Thoughts	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Avoidance and why it should be avoided</li> <li>• Safety behaviours</li> <li>• Graded exposure</li> <li>• Personal stories</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Facing Your Fears Quiz</li> <li>• My Safety Behaviours</li> <li>• Facing Your Fears</li> </ul>

