



TEND

Transforming global mental health through

scalable immersive therapies

SERVICE DEFINITION DOCUMENT 2026



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1. An introduction to Tend

Tend's mission is to radically transform the lives of people with common mental health conditions that affect a billion people globally every year (WHO, 2025). Our first goal is to transform the way people with depression and anxiety are treated. Tend's digital intervention offers a new scalable way to support mental wellbeing anywhere in the world, right where it is needed most, at a cost affordable to all.

Tend is leading the way in creating scalable, evidence-based immersive interventions, starting with our Class I VR-Mindfulness Based Intervention (VR-MBI) focused on transforming the lives of people with depression and anxiety.

Advances in VR technology have allowed us to create our breakthrough immersive Mindfulness Based Intervention. Tend VR-MBI takes place in an immersive virtual world, delivered via a virtual reality (VR) headset. It is an adaptation of Mindfulness Based Cognitive Therapy (MBCT), one of the most thoroughly clinically tested and effective therapies to treat depression and anxiety. A wide range of research from across the world (see Section 5) has shown MBCT's huge benefit to a wide range of individuals, improving their mood and productivity at home and at work.

Our VR-MBI is entirely scalable and it can be delivered anywhere, any time, at greatly reduced cost compared to traditional talking therapies. The provision of an immersive space away from users' usual surroundings has proved extremely successful in improving retention and course completion. Our VR-MBI is 2-5 times cheaper than CBT, with minimal waiting time, >50% average reduction in PHQ-9 (depression) and GAD-7 (anxiety), >80% completion rates, and a single headset can treat 200 patients a year.

Tend is the first VR intervention based on MBCT being deployed as part of NHS Talking Therapies Service Pathway. For the first time ever, we can deliver a digital VR-MBIMBCT-style anywhere at any time of day or night.



An image from Tend's VR-MBI programme.



2. Service Model

Tend's VR-Mindfulness Based Intervention can be used to improve access and recovery rates as an adjunctive intervention, offering an effective way to reduce patient waitlists and fits into existing care pathways.

2.1. Aims and Objectives of Tend

Tend's Virtual Reality Mindfulness Based intervention was developed to support access to key MBCT concepts and skills development at scale without the need for a facilitator to be physically present during the sessions. It aims to utilise the advancements in VR to immerse the user in the experience, allowing them to focus on the information, guidance and activities without everyday distractions or the usual challenges that can come from attempting to imagine and visualise concepts.

Tend VR adapted MBCT with MBCT accredited teachers and clinical psychologists, to ensure its suitability for use via VR headsets and the safety and effectiveness of the therapeutic content of the VR programme, the interactive activities within the sessions, the immersive environment, the gamification elements and the continual development and improvements of the programme (as part of a multidisciplinary team review process). Over the years Tend VR have also co-created content and closely collaborated with lived experience advisors to ensure the VR-MBI is fit for its intended purpose.

2.2. Which Services Use Tend

Tend VR-MBI has been developed as an intervention for anxiety and depression.

2.2.1. Talking Therapies

The primary use case for Tend VR-MBI is as an intervention for anxiety and depression at NHS Talking Therapies Step 2 located in the Supported Self Help part of the NHS Talking Therapies Service pathway. Our evidence suggests that VR-MBI can be used for patients with moderate/severe depression and/or anxiety, therefore it could be considered as equivalent to a Step 2 intervention. Use of Tend VR-MBI at Step 3 or above is at clinical discretion.

2.2.2. Other Services

Tend VR-MBI has been piloted successfully as an adjunctive therapy outside of Talking Therapies as part of psycho-oncology pathways.

2.3. Eligibility Criteria

- 18 years or older (no upper age limit)
- No active suicidal intent and no immediate risk of harm to self or others
- Willing to commit to the full course (8 sessions, plus mobile app practice, over 8-10 weeks)



- Not severely claustrophobic or does not have a trauma response triggered by not being able to scan their surroundings.
- Understand written and spoken English well enough to provide informed consent and to participate in the programme
- Access to WIFI and at least rudimentary knowledge of technology
- Private space in the area planned for use of VR headset (if home based approach is used).
- Experiencing hallucinations, delusions or severe depersonalisation/dissociation; some presentations of schizoaffective disorders might be contra-indicated.
- Not having moderate or severe learning difficulties
- Not having physical health conditions that would interfere with the headset technology, for example, experiences severe motion sickness, has photosensitive epilepsy or wears very strong prescription glasses. Some brain injuries could fall into this category – that would need to be decided on an individual basis.
- If the person is vulnerable to falls, or very unsteady on their feet then even though this is a seated VR experience it might not be suitable for them.

2.4. How Tend Is Delivered

Tend VR-MBI is an immersive eight-week course, delivered via Tend-supplied VR headsets which are sent directly to NHS teams with all relevant software pre-loaded onto the devices.

The devices are 'locked' so that no other software can be added without administration rights which are managed by Tend.

Because Tend VR-MBI is designed for patients to be able to use independently of clinicians, Tend offer a range of video materials to support patients in their use of the VR headset and in their introduction to the Tend VR-MBI programme.

Tend can provide examples of the training, the scripts and support videos, all of which can be tailored and adapted to specific patient groups and to the requirements of staff involved in their support.

Training for staff includes hands-on experience with the headset and an introduction to Tend VR-MBI. This can be carried out in person, with Tend staff delivering the training, or it can be delivered on a cascade model where senior and supervisory staff are trained (in person) to deliver training and support to other staff.

2.4.1. On-Site Delivery

Tend VR-MBI can be delivered on-site with NHS teams. This is the approach that Tend usually recommends. The only requirement is a quiet room where the course sessions can be completed without distraction. In this model VR headsets are kept on-site and patient appointment



bookings are managed in the same way as they would be for any other on-site service.

2.4.2. At Home Delivery

Tend VR-MBI can, by exception, be accessed in the patient's home. In this model, VR headsets are sent to the patient's home where they complete the course over 8 weeks, at times and locations of their choosing, before returning the headset. Usually the patient would still attend the NHS site to complete the introductory session and, possibly, the final programme session.

2.4.3. Hours of Service

Tend VR-MBI can be accessed on-site by patients at any time as defined by the relevant NHS teams and there is no dependency on the availability of Tend staff or qualified clinicians to deliver the VR course.

2.4.4. Patient Reported Outcome Measures (PROMs)

PROMs are recorded as per existing processes with no identifiable patient data recorded or stored as part of the Tend VR-MBI course. Tend recommends that a PWP contacts a patient at least fortnightly to check in and take PROMs as the course progresses.

NHS Talking Therapy or other services take standard measures and assessments of patients. Tend recommends that a PWP contacts patients at least twice during the programme, or at more frequent intervals determined by the service, to check in and review PROMs as the course progresses to ensure patient safety, escalating or offboarding from the Tend VR-MBI service where needed.



3. Training, Delivery and Support

3.1. Training

Before implementation Tend will deliver full training to staff covering the hardware, software and the program. This will include scripts and supporting videos. The videos can be viewed here (to note - Tend are currently updating some of these videos)

- Patient video: all about the VR headset and how to get started with Tend VR-MBI
- Staff: The VR headset and how to support patients
- VR-MBI: The course and the mobile app
- Patient: Refresher video

3.2. Delivery

- Existing patients screened as suitable for VR-MBI via waiting list triage are offered the programme.
- Tend provides a short screening for eligibility checklist to all services deploying Tend to ensure that VR is appropriate for the patient.
- Eligible patients who are interested in accessing Tend VR-MBI are introduced to Tend via a 30 minute in-person session that gives them the chance to try the headset, sample the course and ask any questions they might have.
- At the end of the introductory session the patient decides whether they want to progress with Tend VR-MBI.. It's important that the patient takes that decision after the introductory session rather than at the screening appointment because it helps increase retention if they understand fully what to expect. The patient is not considered a Tend VR-MBI patient until they have reached this stage.
- If they decide to go ahead then they:
 - Download the mobile app there and then, with the practitioner talking it through with them and emphasising the importance of practice outside of the headset, applying learning to the real world
 - Book appointments for all 8 sessions at the outset, at an NHS (or local community) setting. In exceptional circumstances, where the patient cannot attend at a setting, they could be loaned a headset to use at home. Local arrangements for the loan of equipment, monitoring of progress and assuring the return of the headset need to be in place. .
- Tend recommends that each patient has an allocated NHS contact (possibly a PWP) who can review progress, encourage participation and monitor wellbeing at least twice during the patient's 8-week Tend journey, ideally weekly .
- Agreed escalation strategies for patients identified as needing greater support will need to be in place.



- Patients' outcome measures are administered by the NHS service at the usual times and once final outcomes measure have been collected the usual discharge processes would apply.

3.3. Support

- 3.3.1. Following an initiation call during which we identify the client's needs, specify all requirements, including clinical safety considerations, and develop a deployment plan, we provide in-person training session for key staff.

During this session, each staff member completes our introductory VR-MBI session to gain a clear understanding of how the programme works and what end-users will experience. We also recommend that core delivery staff complete the full VR-MBI course.

As part of onboarding, we supply a comprehensive suite of training, guidance and support materials, including:

- Guidance and Support on implementing Tend VR-MBI- this document, outlines how to prepare for implementation, how to screen patients (including eligibility criteria based on Tend's Clinical Safety Case Report), how to introduce users to Tend, and other key operational information. The document includes suggested scripts and clinical and theoretical background information.
- Training videos demonstrating how to set up and use the VR headsets, how the course is structured, the course content and what to expect from the companion mobile app.
- Written instructions providing clear, step-by-step guidance on how to use and operate the VR headsets.

This combination of live training, practical experience, and clear documentation ensures staff can effectively support users from day one.

3.3.2. Remote Support

All initial training is in-person and following this Tend provide remote support via email, phone and online meetings. All support is free. Support is available 09.00-17.00 Monday - Friday (excluding bank holidays). First line support via email with an Account Manager with 24hrs response with second line support with a Technical Manager within 48hrs and third line support within 72 hrs. Additional or dedicated support will be agreed within an SLA.

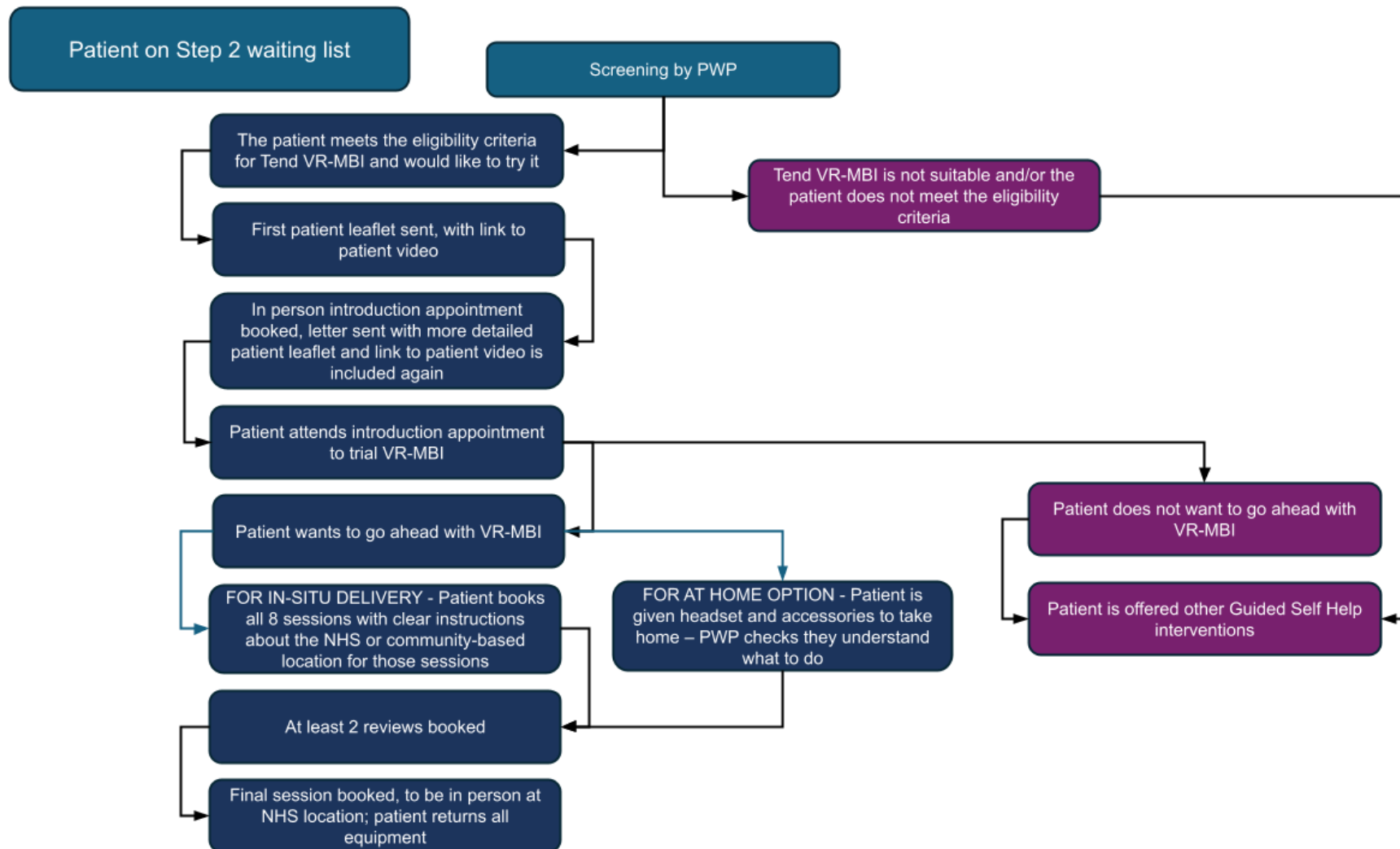
3.3.3. Outages



Tend VR-MBI will be available to end-users at all times except where updates to either the software or hardware are required, with updates conducted during off-peak hours, typically overnight.



4. Example of the NHS Talking Therapies Tend VR-MBI Pathway





5. Tend Outcomes

Thus far, we have conducted five pilot and feasibility studies with the universities of UCL, Manchester and Cambridge and launched our service with NHS Talking Therapies services in the northeast and VCSE services across the country. Our results to date have been outstanding, consistently demonstrating that Tend's VR-delivered Mindfulness Based Intervention (VR-MBI) is a feasible, acceptable, and clinically reliable intervention for depression and anxiety.

Across multiple studies, including partnerships with NIHR, UKRI and Mind, showing large effect sizes (Cohen's $d > 1.0$) for reducing symptom severity for depression and anxiety, often moving participants from moderate clinical ranges to non-clinical ones. For example, in the NIHR-funded study, 77% of participants showed reliable improvement in depression and 86% in anxiety, with no reliable deterioration observed. Engagement was also notably high; among those who completed more than one week of the course, the completion rate rose to 82%, which is higher than many unsupervised digital interventions.

In real world NHS and VCSE settings our results are even more impressive: Depression (PHQ-9): Mean drop 7.46, Cohen's $d = 1.15$ (v.large), Reliable Recovery = 64.0%. Anxiety (GAD-7): Mean drop 7.64, Cohen's $d = 1.42$ (v.large), Reliable Recovery = 61.5%

6. VR-MBI: Mindfulness Based Cognitive Therapy (MBCT) and VR evidence base

Mindfulness-based cognitive therapy (MBCT) is a group-based intervention that uses elements of mindfulness-based stress reduction (MBSR) and cognitive behavioural therapy (CBT). MBCT includes systematic training in mindfulness meditation, with patients practising mindfulness exercises to become more aware of their thoughts, emotions, and body sensations. This supports people in forming conscious connections between the body's response to stressors and their psychological state (Kabat-Zinn, 1990). In addition, MBCT contains elements of cognitive therapy, such as psycho-education explaining the role of cognition in depression and exercises to illustrate how one's thoughts, emotions, and behaviours, induce and maintain depressive symptoms.

The combination of mindfulness and cognitive therapy used within MBCT is thought to help individuals recognise the automatic activation of dysfunctional cognitive processes, such as ruminative and negative thoughts, and to disengage from these dysfunctional processes with the goal of reducing depressive symptoms and future risk of depressive relapse (Williams et al, 2008).

There is a large body of research highlighting the benefits of MBCT as a treatment for depression and anxiety spanning the last thirty years. In a randomised control trial (RCT) MBCT was compared to a health-enhancement programme, which included physical fitness, music therapy, and nutritional education, in individuals with treatment-resistant depression (Eisendrath et al., 2016). MBCT was



significantly associated with reduced depression-symptom severity compared to the health-enhancement programme.

Furthermore, an RCT to compare MBCT to a psycho-education programme in a small sample of 43 patients with depressive disorder who had not achieved remission following the use of antidepressants showed significant improvements in depressive symptoms, as well as on measures of mindfulness and quality of life (Chiesa et al., 2015). Strauss et al. conducted a meta-analysis that evaluated 12 studies investigating mindfulness-based interventions for individuals with current anxiety or major depression. MBCT significantly reduced primary symptom severity for those with current depression, compared to control conditions (Strauss et al., 2014). A systematic review of related literature by Mackenzie et al. (2018) concluded that there was strong support for the efficacy of MBCT; however, dissemination was problematic due to limitations such as time restrictions and staff training, and this meant access to MBCT treatment for the general public was very limited.

The systematic review by MacKenzie et al. (op cit) concluded that there is growing potential for self-help MBCT dissemination which could remove barriers to care. These barriers are wide-ranging but include financial and funding barriers to supporting people at an early stage of their mental health journey. This suggests that a novel method of delivery, using innovative technology, has the potential to attract people to VR-MBCT when they might otherwise have rejected forms of mental health interventions.

There have been many studies into the key mechanisms of change and findings show mindfulness, repetitive negative thinking, self-compassion and positive affect and cognitive and emotional reactivity as core mechanisms of change (MacKenzie et al., op cit). A systematic review specific to major depressive disorder (MDD), van der Velden et al. (2015) reviewed 23 clinical trials of MBCT for recurrent MDD to evaluate mechanisms of change. Studies were included if they examined mechanisms in MBCT for MDD, had adult participants, and MBCT was conducted in accordance with the manualised procedures. The results showed that in 12 of the 23 included studies, MBCT outcome was associated with or predicted by changes in mindfulness, rumination, worry, self-compassion, de-centring, and/or meta-awareness. Given the overlap among mechanisms identified in the reviews, several of the predominant mechanisms of change will be discussed (Van der Velden et al., 2015).

However, despite research into the key mechanisms of change and a growing movement towards self-guided MBCT, compliance with home practice in line with traditional treatment is difficult. In 2017, a systematic review showed that participants who attended formal training only completed 64% of the assigned practice at home, averaging about 30 minutes a day, six days a week (Parsons et al., 2017).

We have explored the potentially positive impact of self-help methods to the delivery of an approach that includes key elements of MBCT that bring about



change by developing an immersive virtual reality programme. Our aim has always been to improve adherence and retention using this novel approach, thereby improving mental health in line with the previous research outlined above. In all of Tend's research studies thus far we have focused on people with depression and anxiety symptoms, as measured by PHQ-9 and GAD-7, that would normally lead to them being eligible for NHS Talking Therapies treatment.

Virtual reality (VR) is increasingly incorporated into psychotherapy, with the literature documenting its effectiveness in treating anxiety disorders, pain, and stress. For example, a study conducted on fear of heights found that treatment using VR was at least as good as, and most likely better, than the comparative face-to-face intervention (Freeman et al., 2018). However, few studies have incorporated VR into mindfulness interventions. A study by Chandrasiri et al. (2020) trialled VR mindfulness compared to conventional mindfulness practice at a beach location with 16 participants. Although participants in the experimental condition experienced an increase in mindfulness, VR was not significantly more effective in facilitating mindfulness overall, although the VR condition was characterised by a significantly greater increase in decentring. However, research by Seabrook et al., 2020 showed that state mindfulness ($P < .001$; Cohen $d = 1.80$) and positive affect ($P = .006$; $r = .45$) significantly increased after using the VR mindfulness app. No notable changes in negative emotion, subjective arousal, or symptoms of simulator sickness were observed across the sample. Participants described the user experience as relaxing, calming, and peaceful. Participants suggested that the use of VR helped them to focus on the present moment by using visual and auditory elements of VR as attentional anchors. The sense of presence in the virtual environment (VE) was identified by participants as being helpful to practising mindfulness. This study used a generic mindfulness-based programme as opposed to a course-based approach with key mechanisms of change.

As set out above, there is a wealth of evidence about the efficacy and effectiveness of MBCT and about the potential of VR when working with people with mental health difficulties. Offering a mindfulness based intervention (MBI) based on MBCT via immersive virtual reality (VR-MBI), widens access, enables scalability and provides people who normally struggle to access mental health services with something new that they can access either at home, or in a community or clinic setting.

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7. Contact

For more information on these services please contact:



Sean Carroll
Studio 307,
Netil Corner,
89-115 Mare Street,
London, E8 4RU
sean@tend-vr.com

For general information and queries please contact:
support@tend-vr.com