Independent Evaluation of Be Mindful in four practices in Hampshire & Isle of Wight Integrated Care Board

Be Mindful

Wellmind Health

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DISCLAIMER

This report presents the findings of an independent evaluation of Be Mindful in the context of four Hampshire & Isle of Wight (HIOW) Integrated Care Board (ICB) primary care practices. The findings of this independent evaluation are those of the authors and do not necessarily represent the views of HIOW ICB or Wellmind Health.

DECLARATION OF INTEREST STATEMENT

Wessex AHSN supports innovators to bring their innovations to the NHS as well as provide an evaluation service more broadly to our members and others. On occasion, we evaluate innovations that we have also supported. Whilst these evaluations are independent, for transparency we disclose our dual role where applicable. In this report we note the dual role of Wessex AHSN to facilitate both implementation and independent evaluation of Be Mindful.

ACKNOWLEDGEMENTS

We would like to thank practice staff and patients for their participation in this evaluation.

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EXECUTIVE SUMMARY

BACKGROUND TO THE DEMONSTRATOR PROGRAMME AND BE MINDFUL

The Hampshire & Isle of Wight Primary Care Digital Roadmap has been written to create a consistent and coherent plan to further digitise primary care services in line with local, regional, and national agendas. The aim of the Hampshire & Isle of Wight Digital Self-Care Demonstrator project was to develop and embed a robust digital self-care offer. Wessex Academic Health Science Network (Wessex AHSN) supported the embedding and evaluation of three digital self-care innovations, via the Wessex Academic Health Science Network Primary Care Demonstrator programme. Be Mindful, an online mindfulness-based cognitive therapy course which guides participants through four themed modules, was selected as one of the digital self-care innovations included in the Demonstrator project. This report presents the findings of the Be Mindful evaluation.

THE EVALUATION

The evaluation used a mixed methods approach to gather quantitative and qualitative data concurrently to provide intelligence on Be Mindful. This included practice profile data, staff survey data about innovation attitudes, Be Mindful utilisation metrics, Demonstrator practice staff interviews, patient acceptability surveys, Patient Activation Measure (PAM) surveys, and practice data extraction of additional patient demographics to support analyses.

Following data collection and analysis of each data source, a data synthesis process was undertaken to draw together the findings and to develop conclusions to the evaluation questions.

The evaluation sought to answer seven questions on (1) the extent and variation of use across the four practices and (2) the impact on patient care, (3) the extent that Be Mindful was acceptable, appropriate, and implementable, (4) the impact on anxiety and depression activity in the practices, (6) how any impacts had occurred, and (7) what lessons could be gleaned from the experience.

LESSONS LEARNED FOR HIOW ICB TO SUPPORT PRACTICES

1. It was apparent that Health and Wellbeing teams were well-placed to introduce, enrol, and support patients as they worked through the Be Mindful course over several months. As different practices used different models, it may be helpful for the ICB to recommend Health and Wellbeing teams (or similar) as the first approach to promoting enrolments to and supporting patients to work through Be Mindful.
2. Staff and patients' preferences combined to indicate there was a need for a hybrid approach (human clinician and digital solution) to support digital self-care in the context of low-level depression and/or anxiety. Patients often required careful introduction to the Be Mindful course to explain mindfulness and someone to discuss progress with.
3. A hybrid approach was also considered valuable to support patients during the intervention to keep their engagement with the course. It may be helpful for the ICB to recommend that Be Mindful is operationalised in conjunction with human support.
4. Based upon the trends in the PAM data, it may be valuable for the ICB to support practices with triaging which patients may be suitable and appropriate to refer for the Be Mindful course as the intervention is digital and self-care in nature. For example, PAM level 1 patients may be too disengaged and overwhelmed to undertake the course, whereas PAM level 2 and above may be more likely to engage with the Be Mindful course.
5. The usage of Be Mindful over time was low, so the ICB may consider recommending other well-placed services to refer patients to the Be Mindful course. For example, Be Mindful could be a short-term solution whilst waiting for formal assessments from e.g., community mental health

teams (CMHT) or talking therapy, or it could be an offer to patients accessing voluntarily sector listening services, or as an intervention to offer alongside condition-specific treatments for people living with long-term conditions – which are known to be associated with higher likelihood of mental illness.

LESSONS LEARNED FOR PRACTICES TO SUPPORT THEIR STAFF

1. Practices that used Health and Wellbeing teams referred/enrolled more patients to Be Mindful compared to a GP-led approach seen in one practice. The former have the time and ability to navigate patients concerns during and after the enrolment point. It would be beneficial to consider their (or similar) involvement in the implementation of Be Mindful.
2. Due to 60% of patients failing to get beyond the introduction section of Be Mindful, the referral criteria should be given careful thought. PAM level 1 patients may be too disengaged and overwhelmed to undertake the course.
3. Practices could adopt a hybrid model (human clinician and digital solution) to support digital self-care in the context of low-level depression and/or anxiety. Be Mindful should not be considered by clinicians as a simple self-referral solution. Further exploration of what a hybrid model is in practice is required (e.g., does the human input need to be from a clinician and does it need to be face-to-face, does it need to be instigated by the clinician or the patient, when and how do check-ins need to happen).
4. Two of the three completers were over 68 years old and all three were over 43 years old. As a result, it may be important for practices to ensure staff do not make age-related assumptions before speaking with patients about their willingness to engage with mindfulness-based or digital interventions.
5. The email reminder system, organised by Be Mindful, was considered too constant for patients who are already anxious or depressed. It is possible a practice-delivered reminder system or joint practice / BeMindful system would be more effective at prompting patients at the right time. This would also offer the opportunity for the reminders to be sent to the patient based on a customised level of support identified for individual patients from someone who either has an existing rapport with and for the clinician to use this as a mechanism to check-in with patients, or for the reminders to be sent from Be Mindful however at the frequency determined by the patient.
6. In terms of practice-led implementation activities, they should consider the communication channels when a practice / PCN is spread across several locations and with a wide range of staff. Practices could consider appointing a champion and consider mental health colleagues' involvement even if they are linked to crisis work which Be Mindful would not be suited to, as they could be the natural fit for owning this work and supporting practice staff to feel more confident when explaining the course content to patients.
7. There are many meetings and groups within the governance of a practice, and communications can be lost between groups in the busy nature of post-pandemic general practice. It may be worth considering a permanent agenda item about new innovations being assessed at the practice at one of the senior management meetings, or a new group or innovation committee, to oversee the deployment and support any evaluation activities ongoing. This would ensure that new innovations are known practice wide and do not fall off the radar, resulting in wasted time and resources for all stakeholders.

LESSONS LEARNED FOR PRACTICES TO SUPPORT THEIR PATIENTS

1. Patients can fall into several user categories: Never users, Explorer users, Invested users, Near Completers, and Completers. Further investigation of these groups, e.g., their demographic and

clinical characteristics, would benefit clinician decision-making about new enrolments and subsequent analyses of impact.

2. Practices could ensure patients are aware of the app interface for ease of use on mobile phones as well as the web platform. This may mean more patients are able to engage or remain engaged with the course as they would be able to self-select the most appropriate interface for themselves.

LESSONS LEARNED FOR BE MINDFUL AND WELLMIND HEALTH

1. Nuances of how patients go through the course were not able to be identified from the data captured by the Be Mindful portal, e.g., which videos patients watched and then revisited etc. This is important as without this understanding of how patients navigate and work through the course, it is difficult for practices to know when and how to best offer support to their patients. It is recommended that more data capture functions are built into the Be Mindful platform to benefit the platform developers and clinicians.
2. Wellmind Health may wish to review the data available from portal exports. For example, the counts of patient satisfaction ratings could not be attributed to the module or overall satisfaction at the end of the course. This meant understanding patient satisfaction in a meaningful, informed way in relation to the different course modules to ensure appropriate inferences were drawn was challenging.
3. A review of the very constant email reminder process may avoid patient perceptions of being overly burdened whilst already feeling anxious or depressed. A joint solution with clinicians would be preferable and likely to help course completion by contacting patients based on live information from clinicians and possibly having the reminder come from the clinician, as the relationship and rapport already built with the clinician will potentially be more encouraging.
4. Wellmind Health could consider including more unsubscribe options, such as unsubscribe from the course completely, unsubscribe from the email reminders, unsubscribe from the emails reminders for 1 week, for 2 weeks etc. This would offer the patient the chance to disengage for legitimate reasons (e.g. at crisis point) and reengage (e.g. via a function on the platform) without being automatically prompted at highly stressful or anxious times.
5. Wellmind Health may wish to consider a more dynamic presentation of the intervention and content for healthcare professionals. This may enable healthcare professionals to have greater confidence in the information they provide to patients, thereby leading to more referrals to the course.
6. Wellmind Health may wish to consider a more flexible course structure, e.g. so patients can visit mindfulness activities, such as the body scan, when they wish. This would also be valuable when considering the video content, to ensure the videos were delivered in a more accessible way for patients.

CONCLUSIONS

The impact of Be Mindful, for those that completed it, was positive. It was perceived by staff as having great potential to support low-level depression and anxiety in general practice settings, but also perceived to have a range of content, delivery, and implementation challenges.

It appeared to be more effective when managed by Health and Wellbeing teams, but a range of challenges were identified. Lessons learned for the ICB, primary care practices, and the developers are outlined in the section above and, if addressed, may improve enrolment and completion rates.

It was perceived by patients and staff that course delivery mechanisms could be made more flexible and engaging and that the automatic course progress reminders be reconsidered to encourage more engagement and completion of the course.

It is proposed that a hybrid (human clinician and digital self-care solution) approach should be considered going forward. Health and Wellbeing teams (or similar) would be well-placed staff members, as 'experts' and/or 'champions' within practices, who could ensure appropriate triaging of patients prior to referrals being made, and then support patients to complete the modules and provide reminders as needed. This could address the different ways of working between practices identified in this evaluation and offer a solution to the challenges of introducing the Be Mindful course. It may also support general practice to unleash the potential of Be Mindful as a digital self-care innovation.

1. BACKGROUND

1.1 BACKGROUND TO DEMONSTRATORS PROJECT

The Hampshire & Isle of Wight Primary Care Digital Roadmap has been written to create a consistent and coherent plan to further digitise primary care services in line with local, regional, and national agendas. A partnership between Wessex Academic Health Science Network (Wessex AHSN) and Hampshire & Isle of Wight Integrated Care Board (HIOW ICB) was developed to support delivery of the digital first primary care plans aligned with both organisations' strategic priorities.

The aim of the Hampshire & Isle of Wight Digital Self-Care Demonstrator project was to develop and embed a robust digital self-care offer. Wessex AHSN supported the embedding and evaluation of three digital self-care innovations, via the Wessex AHSN Primary Care Demonstrator programme.

In June 2021, an online workshop focused on depression and anxiety was advertised across the area to encourage GP practice participation in the Demonstrator programme. At the workshop, a range of innovations were discussed and expressions of interest sought from practices. Be Mindful was selected by HIOW ICB as a digital self-care innovation to support patients living with anxiety or depression. A 12-month licence from February 2022 to February 2023 was purchased by the HIOW Digital Self-Care Demonstrator project team. This provided unlimited use of the platform during the project timeframe across up to eight Primary Care Networks (PCNs).

1.2 BACKGROUND TO BE MINDFUL

Encompassing all the elements of mindfulness-based cognitive therapy, the Be Mindful online course guides participants through four themed modules, each comprising two pre-recorded video-led online sessions and three mindfulness assignments to practice daily in their own time. Participants learn about stress, anxiety, and mindfulness practices. The mindfulness course takes a minimum of four weeks but can be completed at the participant's own pace.

- Module 1: Stepping out of auto pilot
- Module 2: Reconnecting with body and health
- Module 3: Working with difficulties
- Module 4: Mindfulness in daily life

At the beginning, participants take part in the first self-assessment measuring stress (the perceived stress scale – PSS), anxiety (generalised anxiety disorder assessment - GAD-7), and depression (patient health questionnaire-9 - PHQ-9). This is repeated at the end of the course to see how their scores have improved. Ways they can continue with their mindfulness journey are suggested, with ongoing, unrestricted access to course resources.

Automatic reminder emails to participants are sent to start or continue the course at the following intervals since enrolment or since they were due to start their next course session, e.g., Module 1:

- 3 days
- 7 days
- 2 weeks
- 1 month
- 3 months
- 6 months
- 1 year.

In the context of the participating practices, patients were introduced and enrolled to the course via a member of staff at the practice.

2. EVALUATION QUESTIONS

Based on the scoping exercise with HIOW ICB, several evaluation questions were developed:

1. To what extent and variation has Be Mindful been utilised by the four Demonstrator practices?
2. What impact has Be Mindful had on service user care?
3. To what extent is Be Mindful acceptable, appropriate, used as intended, feasible and sustainable for service users?
4. What impact has Be Mindful had on the efficiency of anxiety and depression services at the practices?
5. How has Be Mindful impacted on staff and services?
6. What lessons can be drawn from the experience of participating in a Demonstrator project?

3. METHODS

The evaluation used a mixed methods approach to gather quantitative and qualitative data concurrently to provide intelligence on Be Mindful. The quantitative and qualitative data sources included in this evaluation are detailed in Section 4.

Quantitative data from the utilisation metrics and surveys were summarised and graphically presented. Written informed consent was obtained prior to the qualitative interviews and all were audio-recorded to support the analysis. The qualitative interviews were structured around a framework to understand the implementation of digital innovation (Hermes et al., 2019) and analysed using an inductive thematic analysis approach (see appendix for more detail).

Following data collection and analysis of each data source, a data synthesis process was undertaken to bring together the findings and develop conclusions to the evaluation questions.

Each section of this report includes synthesised findings, first reporting the quantitative findings followed by the related survey and qualitative findings to provide a ‘what was happening’ as well as ‘why it was happening’ dialogue where possible.

4. PARTICIPATION

Four practices consented to be Demonstrators. Three practices from PCN 1: Practice A, Practice B, Practice C, and one practice from PCN 2: Practice D.

1. Practice profiles – profiles were developed for each practice using publicly available data. This looked at metrics such as populations, Quality and Outcomes Framework (QOF) and digital maturity, and compared practices to a national average.
2. Staff survey about innovation attitudes - three staff members from three different practices responded.
3. Utilisation metrics – a database of 70 Be Mindful enrolments and course progress activity was available to the evaluation team and provided by Wellmind Health.
4. Demonstrator practice staff interviews – six staff members were interviewed from the four Demonstrator practices. The appendix includes a table of themes and detail on the demographics of

the staff members interviewed. The themes/findings from these interviews are placed in relevant parts of the report and synthesised with other data sources.

5. Patient acceptability surveys – seven patients completed this survey at the beginning of the course. One patient completed this survey at the end of the course. These patients were recruited via the four Demonstrator practices.
6. Patient Activation Measure (PAM) surveys – five patients completed this survey at the beginning of the course. One patient completed this survey at the end of the course. These patients were recruited via the four Demonstrator practices.
7. Patient interviews – recruitment attempts were made as planned, but no patients consented to be interviewed.
8. Practice data extraction to support analyses – 18 metrics were requested from practices. The completeness of the data available varied across the metrics, with some unable or difficult to capture. Definitions of these metrics are described in the relevant results sections of the report.

5. USE OF BE MINDFUL ACROSS FOUR DEMONSTRATOR PRACTICES

5.1 PRACTICE PROFILES

Using publicly available information, it was possible to draw together a profile of each Demonstrator practice on demographics and digitally related factors. This provided another data source to consider when triangulating the findings from different data sources.

Across all four Demonstrator practices, administrative and non-clinical personnel accounted for the majority of staff (at least 45%). At Practice B, GPs accounted for 24% staff, compared to just 14-17% for the rest (https://digital.nhs.uk/data-and-information/areas-of-interest/workforce).

The Demonstrator practices recorded between 20-29% of their populations as aged over 65 years old. This was higher than the national average (17.4%) so it might be reasonable to expect to see a slightly lower rate of digital literacy in these populations (https://digital.nhs.uk/data-and-information/publications/statistical/patients-registered-at-a-gp-practice/april-2021).

Three of the practices scored below the national average for deprivation, which indicated they are in more affluent areas. One practice however scored higher for deprivation compared to the national average (https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019).

Nationally, just under 50% of patients were registered to use at least one online service. For the Demonstrator practices, this ranged between 41-56%. This meant that at least 44% patients at each of these practices were not registered for any online services. This may suggest that either patients were not engaged with online services, or that practices were not yet able or willing to offer this to their patients (https://digital.nhs.uk/data-and-information/publications/statistical/mi-patient-online-pomi/mi-patient-online-pomi).

For all the Demonstrator practices, hypertension affected the largest proportion of patients, followed by depression, diabetes mellitus and obesity. However, it is important to note that the QOF measures may not be a true reflection of prevalence, but rather how good practices were at reporting these conditions (https://digital.nhs.uk/data-and-information/publications/statistical/quality-and-outcomes-framework-achievement-prevalence-and-exceptions-data).

Of the large range of General Practice IT (GPIT) data capture indicators, 27 were chosen as they inform general digital readiness e.g., 'The practice promotes and offers email consultations for practice patients', 'At least 30% patients registered for patient online access appointment booking', and 'Practice system able to support patients to book/cancel appointments online'. Practices self-report on these metrics and all four of the Demonstrators completed the GPIT return. Practice A responded 'Yes' to the least number of metrics

(59.2%), followed by Practice D (70.4%) and Practice B (77.8%). Practice C confirmed 81.5% of the 27 GPIT metrics chosen, suggesting they were the most digitally mature of the Demonstrator sites using Be Mindful. They were also the practice with the highest proportion of patients registered to use at least one online service (55.8%) (https://www.primarycareindicators.nhs.uk/).

When considering the information above, it can be concluded that the four Demonstrator practices generally serve older populations in areas of low deprivation. Also, it could be inferred that digital poverty was less likely to affect these patients compared to other areas, although low digital literacy may be more likely. This may go some way to explaining the low registration of patients to digital services in the Demonstrator practices. This information contextualises the interpretation of the findings in this evaluation.

5.2 STAFF ATTITUDES TOWARD INNOVATION

Only three staff members from three of the four Demonstrator practices responded, so the findings on staff attitudes toward innovation should be considered as indicative only. The findings have been included for completeness.

Of those who responded, all reported being personally in either agreement or strong agreement with all questions in Figure 1, except one person who felt they did not have capacity to personally support innovation in their working context.

Of those who responded, two of three reported either agreement or strong agreement with nearly all questions related to colleagues' attitudes toward innovation (Figure 2). Mixed findings were identified on two questions. Firstly, whether the responding staff member thought their colleagues generally had the capability to implement innovations, and secondly, whether the responding staff member had confidence in their colleagues to weigh up the pros and cons of implementing something new.

The vast majority of those who responded had positive views about their practice's position on identifying and utilising innovations (Figure 3).

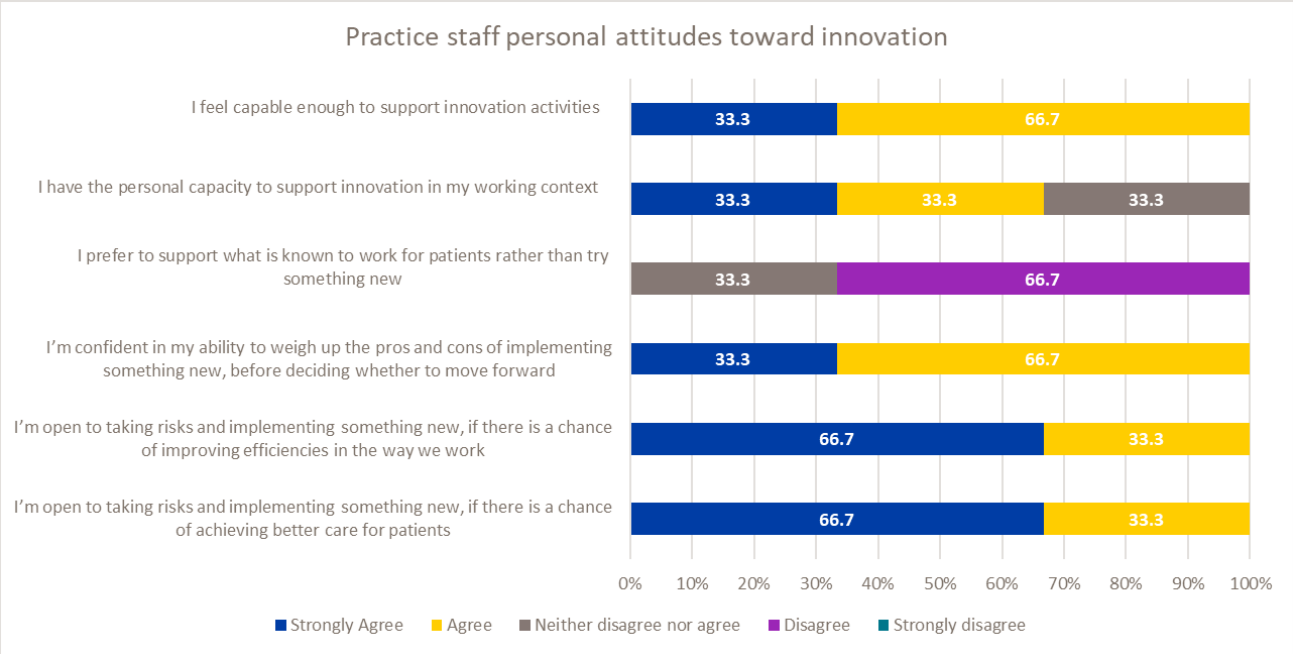

Figure 1: Practice staff personal attitudes toward innovation

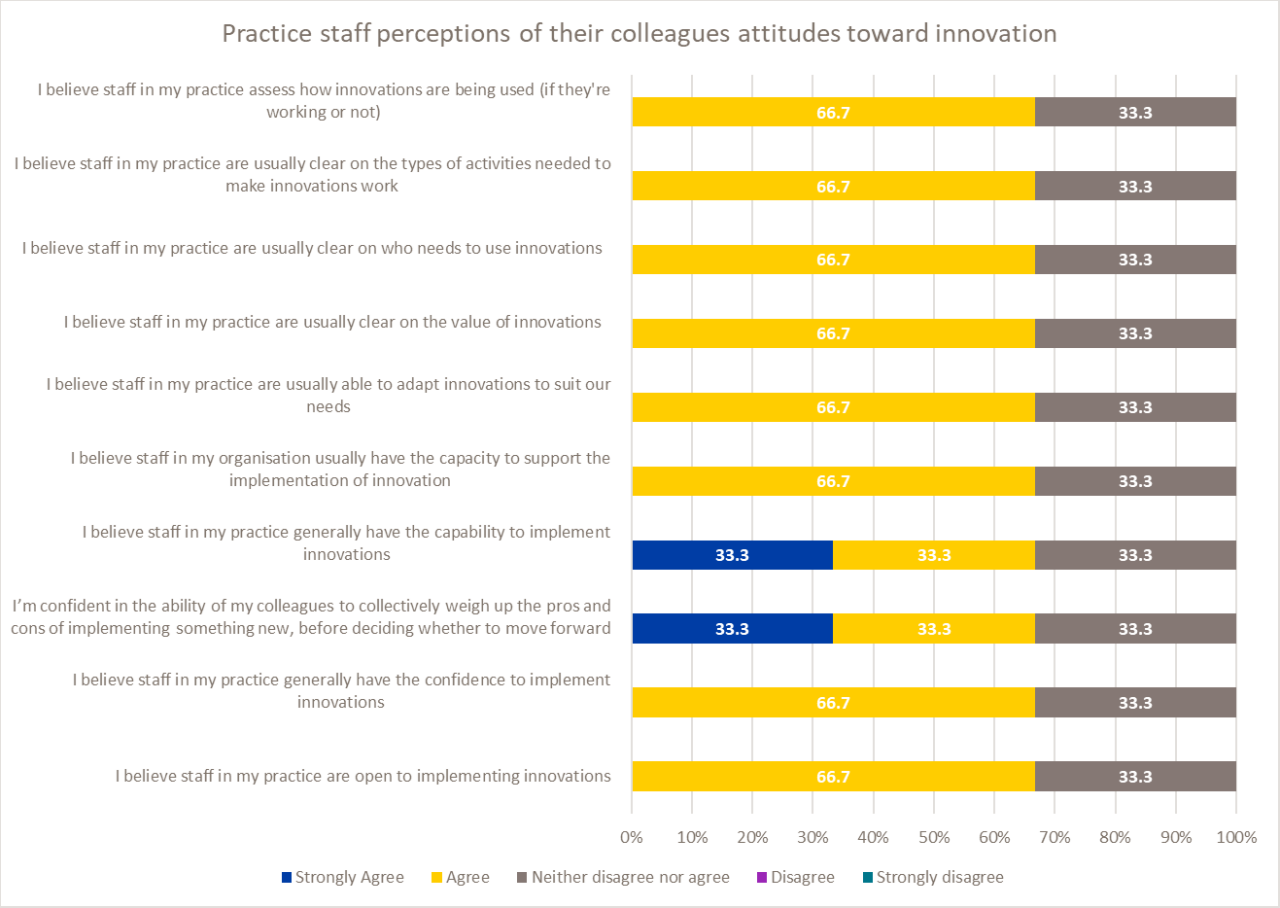

Figure 2: Practice staff perceptions of their colleagues' attitudes toward innovation

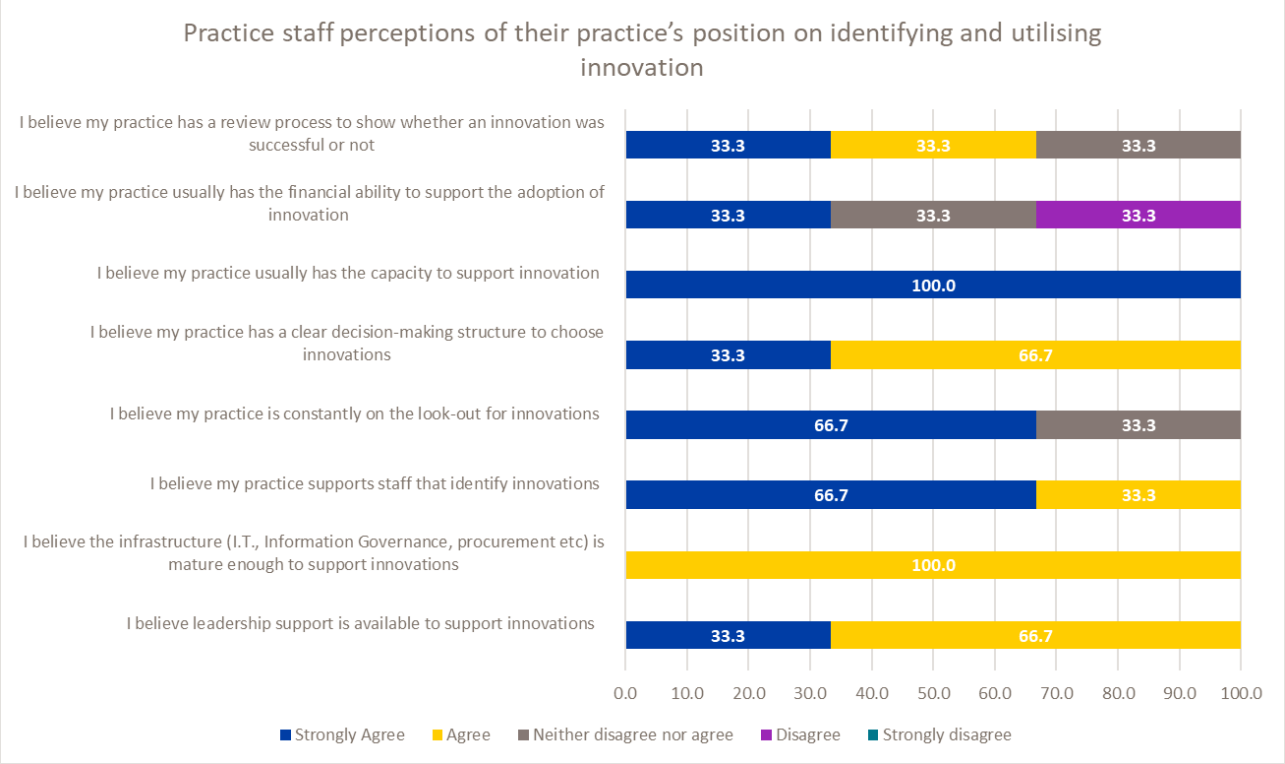

Figure 3: Practice staff perceptions of their practice's position on identifying and utilising innovation.

5.3 EXTENT OF BE MINDFUL USAGE

Across all the Demonstrator practices, 70 patients were enrolled on the Be Mindful platform between 22nd February and 11th July 2022. Whilst five practices were able to refer to Be Mindful, only four consented to in-depth patient and practice evaluation. Practice A accounted for the largest number of Be Mindful patients (37.1%), followed by Practice B (27.1%), Practice C (11.4%), and Practice D (11.4%). After the appropriate information governance discussions with HIOW ICB, for completeness Practice E is included in high-level analyses in this section only. That practice has been anonymised in the high-level analyses, excluded from the practice profiles, not involved in the qualitative elements and no requests for patient data were made from the practice.

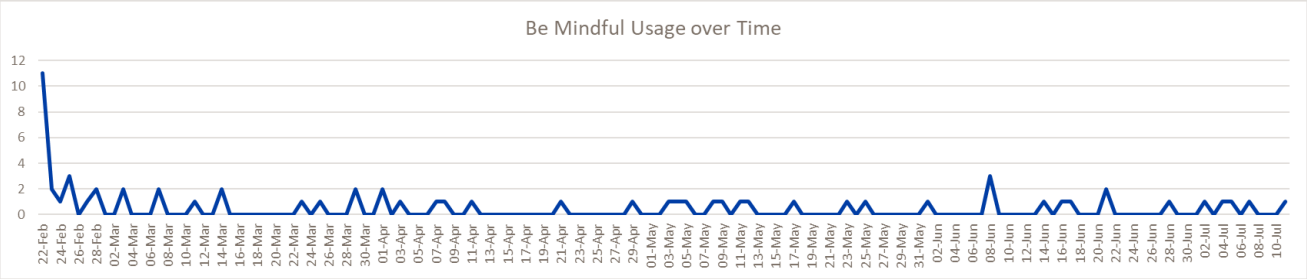

Figure 4. Total Be Mindful registrations between 22nd February and 11th July 2022 for the five practices.

There were many enrolments at the start, indicating that practices may have intended to on-board patients in batches. However, after the first few days, patients were added occasionally or one at a time and this pattern continued until the end of data collection. This trend would suggest that patients are enrolled as and when clinically appropriate or required, rather than practices doing batch enrolments.

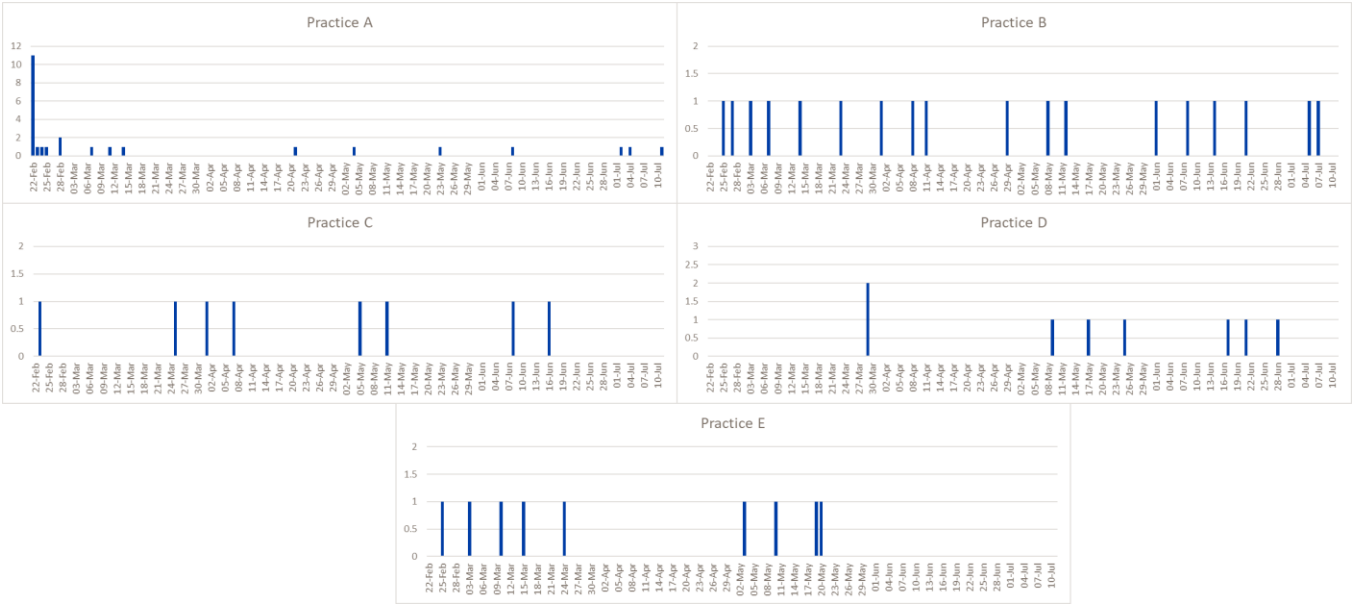

Figure 5. Be Mindful usage by practice between 22nd February and 11th July 2022.

Practice A accounted for the largest proportion of activity (37.1%) and is also the practice that enrolled many patients at the start. Practice D was the last practice to enrol their first patient, and along with Practice C, sporadically continued enrolling. Practice B was the most consistent referrer, doing so one patient at a time on 19 different occasions. Practice E enrolled nine patients, and this was more than both Practice C and

Practice D. These breakdowns show that apart from the initial activity by Practice A, all practices involved had a similar 'less but often' approach to enrolling patients on Be Mindful. This may be because of attempts to ensure referrals were clinically appropriate.

5.4 VARIATION OF BE MINDFUL USAGE

Variation of Be Mindful usage has been analysed at practice level and course progress level. Sub-group analysis has been undertaken at practice level, course progress level, and with consideration of the patient data (e.g., total number of long-term conditions) requested from the participating practices. Below provides details of the definitions for, and caveats related to, the use of patient demographics from the practice held patient data.

Data definitions:

- Type of depression / anxiety: grouped according to anxiety, depression, anxiety and depression, and no diagnosis. Noted that five patients had a diagnosis related to stress.
- Total number of long-term conditions (applied to PCN 1): included anxiety / depression; QOF or World Health Organisation (WHO) definition of long-term or chronic.
- Total number of medications taken (applied to PCN 1): On repeat; non-acute; included PRN.
- Fit note status (applied at PCN 1): preceding year from when data collection closed (12/07/2022); applied at Practice D: between November 2021 to July 2022.
- Total number of GP appointments (applied to PCN 1): from the year preceding when data collection closed (12/07/2022); included telephone, home visits, remote, face-to-face, video consultation, and emergency consultation to encapsulate all potentially relevant appointment types.

Data caveats:

- Date of latest episode: due to potential missing activity in EMIS / patient records, this metric is not considered accurate and therefore not used.
- Medication review complete: due to potential missing activity in EMIS / patient records, this metric is not considered accurate and therefore not used.
- Total number of referrals to Community Mental Health Team (CMHT), total number of psychiatric emergency hospital admissions, total number of non-urgent psychiatric hospital admissions, total number of Mental Health clinic appointments (SNOMED: Seen in MH clinic): due to potential missing activity in EMIS / patient records and challenges with extracting these metrics, these metrics were not considered accurate or possible to obtain systematically and therefore not used.
- Inferential statistics analysis was planned, however due to the small number of patients in each category, this could not be conducted. The following descriptive analysis is based on the 61 patients from four practices that agreed to be Demonstrator practices and provided primary care data.

5.4.1 PRACTICE-LEVEL VARIATION

Most patients on the platform were female (71.4%) and aged between 20-49 years old, with some aged between 50-70+ years old. As a single cohort, females aged 40-49 years old accounted for the largest proportion of patients on the platform (20%). Many patients (70%) were recorded as having between one and three long-term conditions. At least 21% of patients across all practices had recent activity for both anxiety and depression. A further 23% had activity for anxiety only and 15% for depression only. At least 47% patients across all the practices had had their diagnoses for at least five years, with 12 patients being diagnosed with anxiety or depression over 20 years ago.

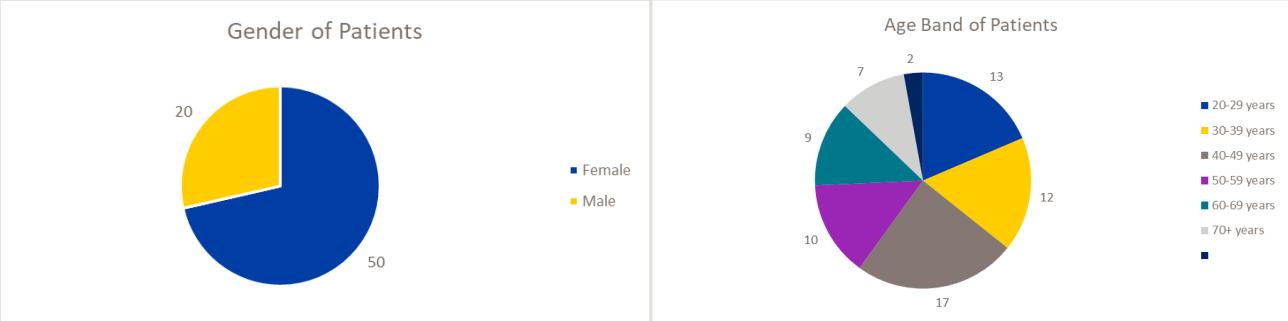

Figure 6. Summary of the demographics of patients registered on Be Mindful.

Of those enrolled, Practice D had the youngest overall population with no patients aged over 59 years old. They had the largest proportion of patients diagnosed with both anxiety and depression (37.5%) but only one of their eight patients had any long-term conditions recorded. Four of their patients were on one medication for anxiety/depression, and two were on two medications. Over a third (37.5%) of patients at the practice live in areas which fall into the most deprived 20% in England. When comparing practice profiles at an individual practice level, only one practice had a higher deprivation score than the national average. It might be reasonable to predict low engagement for these patients and this was reflected in the platform data as none of the eight patients moved on from the introduction by the end of data collection.

Practice C had the largest number of patients with high GP appointment usage in the last year, with five people receiving between 22-41 appointments. Also, one of the patients from this practice and enrolled on Be Mindful had six long-term conditions. This indicates that patients referred to Be Mindful from this practice were likely to have more complex needs.

Practice A had the lowest GPIT score for digital maturity (59.2%), however it had the highest number of patients using the platform, including two of the completers. Practice C also had a completer, although only eight patients registered in total. The latter scored the highest for GPIT metrics (81.5%) and had the largest proportion of patients registered to use at least one online service (55.8%). These practices contradict the idea that practices' digital maturity impacts engagement and individuals (potentially both clinicians and patients) attitudes towards innovation which impacts engagement. At least 44% patients at each practice were not registered to use any online services, 13 patients never logged into Be Mindful, and a further 19 did not get past the introduction.

5.4.2 COURSE PROGRESS-LEVEL VARIATION

To further explore the available usage data, patients referred to Be Mindful were classified according to their completion status. This enabled an analysis of the data according to five different completion status groups (see Table 1). Overall, 13 out of 70 (18.6%) were 'Never users', 29 out of 70 (41.4%) were 'Explorer users', 20 out of 70 (28.6%) were 'Invested users', five out of 70 (7.1%) were 'Near Completers', and three out of 70 (4.3%) were 'Completers'. Figure 7 provides a detailed breakdown of the course progress of each patient enrolled from participating practices.

It is important to note no enrolments from Practice D progressed beyond being 'Explorer users'. Also, two of the three 'Completers' were from Practice A and one from Practice C.

In terms of completions, Be Mindful have a reported an average completion rate of 20% for healthcare patients on their databases and across evaluations they're involved in; however, in this evaluation the completion rate was only 4.3%. Two of the three completers were from Practice A (a male aged 43 years old and a female aged 69 years old) and one of the three completers were from Practice C (a female aged 73 years old).

In terms of timings, Be Mindful reported that healthcare patients on their database and across other evaluations completed the course in 2.8 months. This was similar for the Demonstrator completers, who had an average completion time of 2.3 months. This indicates that despite a low completion rate for the Demonstrators, those who did complete did so in a similar timeframe. Interestingly, 65.5% of patients at the introduction stage logged in within a day of registration but had not been on Be Mindful since, and the patients between modules 1-2 took between 10-29 days to get to their respective points on the course. One patient stood out as an anomaly, as they reached module 2 within 24 hours after enrolment (a male aged 77 years old) but did not progress further into the course.

Table 1. Five classifications of Be Mindful course progression.

Classification group	**Definition**
Never users	Given place but never logged into Be Mindful
Explorer users	Given place and logged in to Be Mindful, including those who also self-assessed, and commenced but did not complete module 1
Invested users	Given place and logged in to Be Mindful, including those who also self-assessed, completed modules 1 & 2, and commenced but did not complete module 3.
Near completers	Given place and logged in to Be Mindful, including those who also self-assessed, completed modules 1, 2 & 3, and commenced but did not complete module 4
Completers	Given place and logged in to Be Mindful, including those who also self-assessed, completed all four modules

Table 2. Heatmap of 70 participants' final position on the course by the number of days between registration and last login, as of 12th July 2022.

	Given Place	**Introduction**	**Module 1**	**Module 2**	**Module 3**	**Module 4**	**Going Forward**
Never used	13						
Less than 1 day		19	1	1			
1-9 days		4	2	2			
10-19 days		3	3	2			
20-29 days		1	2	2	1		
30-39 days					1		
40-49 days		2	1		1	1	1
50-59 days						1	
60-69 days						1	
70-79 days						1	1
80+ days					1	1	1

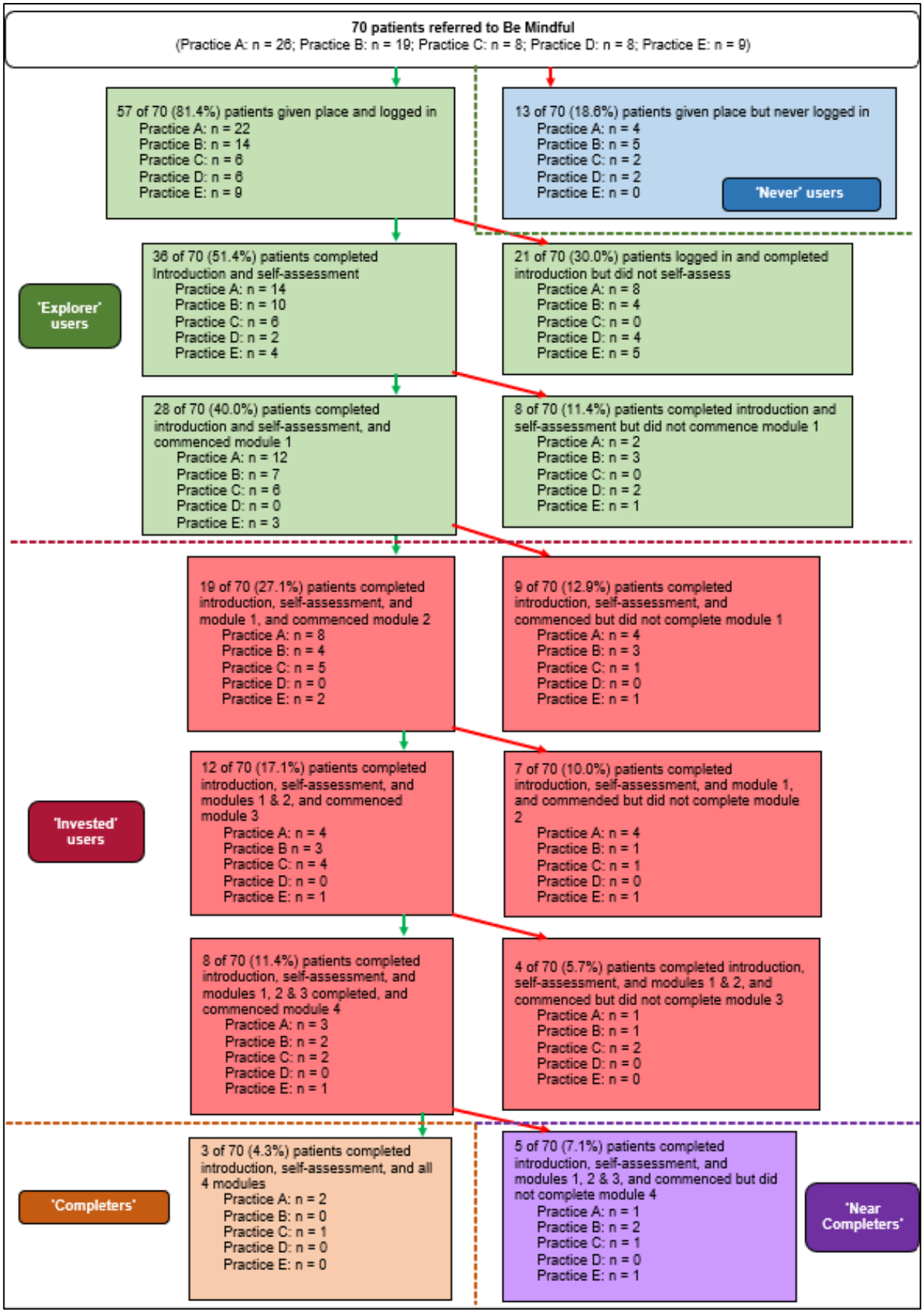

Figure 7. Flow chart of patient enrolments to demonstrate the five classifications of Be Mindful course progression

Using data from the Be Mindful platform and patient data collected from practices, it was possible to understand the differing levels of engagement of the 70 patients enrolled within the evaluation timeframe. Table 2 shows an overall lack of engagement with the platform from patients, with 18.6% of patients given a place/enrolled but never logged on. Also, 60% of patients never started module 1, despite having enrolled and viewed the introduction.

Half of both male and female patients were categorised as 'Explorer users' and 20-25% of each being 'Never users'. Thus, it would appear that gender has no impact on course progress.

Just over a third (35%) of 'Explorer user' patients had a combined diagnosis of anxiety and depression, indicating more complex patients may have struggled with/not found the format of the programme useful. One of the 'Explorer users' had eight fit notes issued in the last year, which is unusual as most patients had none.

Due to the limited data, it is unfortunately not possible to draw a conclusion regarding the demographics for patient engagement of the completers.

All the 'Completers' had mental health diagnoses still recorded as active (one for anxiety, one for depression, and one for both anxiety and depression), and long-term conditions (one patient had one condition, the other two had three conditions recorded). All the 'Completers' have had their diagnoses for at least five years, with one patient being diagnosed over 20 years. This indicates that our 'Completers' were reasonably complex patients. Whilst it could be assumed that some patients may find this overwhelming, it could be theorised these were individuals who were keen to improve their mental health, more educated regarding their condition, and more used to and open to trying different options for managing their condition.

The number of GP appointments did not seem to have an impact on likelihood to complete, as the patients had one, three and 24 contacts recorded each over the last year. Two of the 'Completers' were from areas in the lowest 10% for deprivation, whereas one was in the highest 40% for deprivation. From this data it is difficult to conclude if deprivation has an impact on course progress.

6. ACCEPTABILITY OF BE MINDFUL

6.1 PATIENT ACCEPTABILITY AT THE BEGINNING OF THE COURSE

Seven patients completed the patient acceptability survey at the beginning of the course. Four were female; one was aged 35-44 years, two were 45-54 years, one was 55-64 years, two were 65-74 years, and one was 75-84 years. Only one (FB03) of these seven patients completed the course. All five of the patients who responded to the open answer question regarding ethnicity were 'white', 'British', or 'white British'. The practices represent were Practice A, Practice B, and Practice C. Therefore, although there was a variety of genders, ages, and practices represented by the survey respondents, there was minimal ethnic diversity.

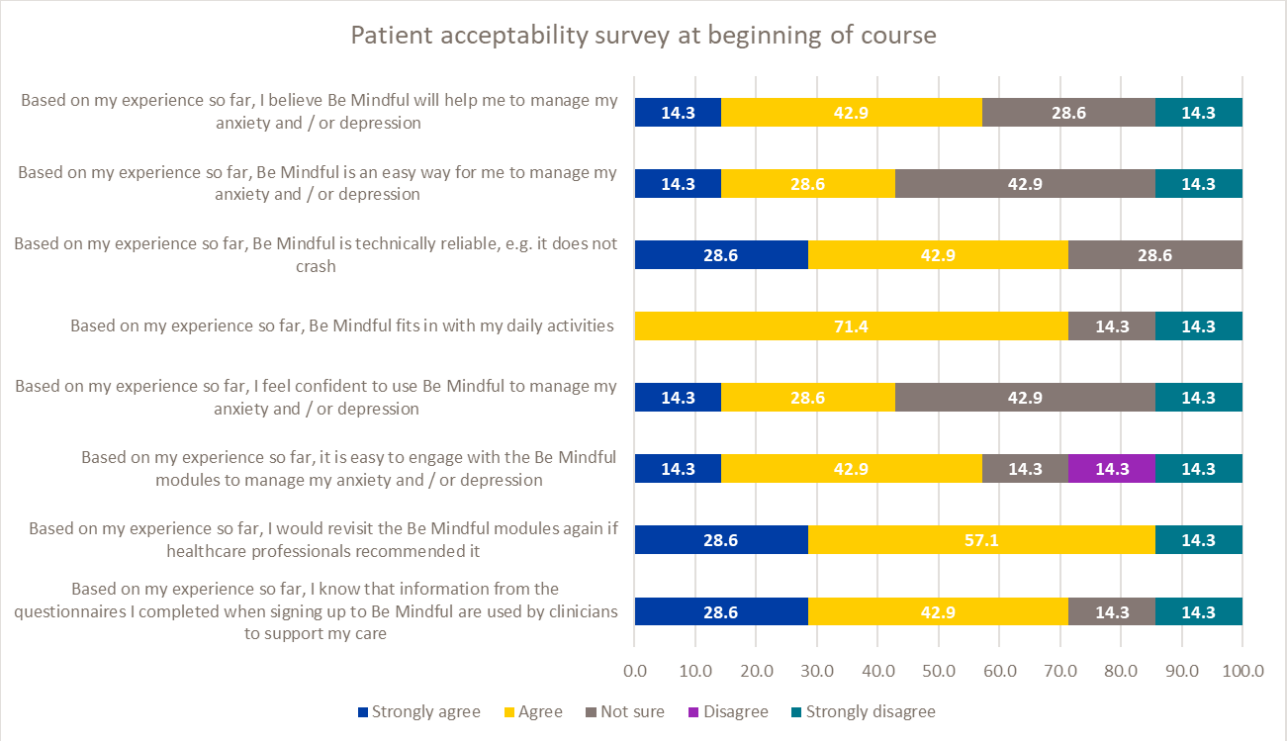

Figure 8. Responses from the seven patients to the acceptability survey at the beginning of the course.

For question 1, four out of seven (57.2%) patients reported they 'agreed' or 'strongly agreed' that Be Mindful would help them to manage their anxiety and / or depression; one patient 'strongly disagreed'.

For question 2, three out of seven (42.9%) patients reported they 'agreed' or 'strongly agreed' that Be Mindful was an easy way for them to manage their anxiety and / or depression; one patient 'strongly disagreed'.

For question 3, five out of seven (71.5%) of patients reported they 'agreed' or 'strongly agreed' that Be Mindful was technically reliable, e.g., it did not crash.

For question 4, five out of seven (71.5%) patients reported they 'agreed' that Be Mindful fits in with their daily activities; one patient 'strongly disagreed'.

For question 5, three out of seven (42.9%) patients reported they 'agreed' or 'strongly agreed' that they feel confident to use Be Mindful to manage their anxiety and / or depression; one patient 'strongly disagreed'.

For question 6, four out of seven (57.2%) patients reported they 'agreed' or 'strongly agreed' that it was easy to engage with the Be Mindful modules to manage their anxiety and / or depression; one patient 'disagreed'; one patient 'strongly disagreed'.

For question 7, six out of seven (85.7%) patients reported they 'agreed' or 'strongly agreed' that they would revisit the Be Mindful modules again if healthcare professionals recommended it; one patient 'strongly disagreed'.

For question 8, five out of seven (71.5%) patients reported they 'agreed' or 'strongly agreed' that they knew that information from the questionnaires they completed when signing up to Be Mindful were used by clinicians to support their care; one patient 'strongly disagreed'.

The seven patients also reported the elements of Be Mindful they most liked about the course. Six of the seven patients responded to the question, and with some of the most liked elements relating to the delivery methods and ability to fit the course into day-today life, whereas others were related to the content itself.

> *"The body scan"* (FB03)

"That I can use it on my phone" (FB02)

"Breathing techniques" (FB05)

"I can stop and start to fit in with the day" (FB06)

"It is given at a slow pace which is easy to understand" (FB07)

Despite this question asking patients what they liked about the course, one patient responded with a negative comment:

"I only accessed the first two activities that were so long winded and pedestrian that I couldn't face continuing" (FB04)

Although two patients reported they did not have any concerns from their early experiences of Be Mindful when asked, one patient expressed a concern regarding what impact or support the GP could have if there were any issues they identified.

"As an individual accessing the system out of interest initially I am not clear what support I would get from my GP if I identified issues for which I needed help" (FB04)

Another patient reported concerns around being able to enter the course content if they missed days.

"I would like to enter an exercise at my own time if I miss one on another day" (FB07)

Three of the five patients who answered the question around any problems they have experienced early on in engaging with Be Mindful stated they had none. One patient reported they had found the site difficult to navigate:

"Find it difficult to navigate to where I want to be on the site make the site simpler" (FB03)

The fifth patient who expressed problems related them to how engaging they found the content:

"I haven't accessed enough of the programme to be able to answer this as it was so boring and I couldn't be bothered to go any further" (FB04)

Suggestions for improvement were sought from the patients who completed the survey. There were two comments aimed at the Be Mindful innovators:

"Make site simpler so I can go straight to body scan as I like to do this almost every day" (FB03)

"*Make it into an app so you can easily enter the program on your phone, unless there is one and I can't find it"* (FB07)

Another person did not feel there were any suggested improvements from their early experiences of the course:

"I can't think of any at mo" (FB06)

The fourth person who responded to this question suggested that the Be Mindful course was of less value to them than other resources or information to help them manage their anxiety or depression:

"I get far more from the mindfulness activities on my Fitbit, from which I can pick and choose from the range of activities as I need them" (FB04)

These data indicated early thoughts that Be Mindful was moderately acceptable to patients regardless of their completion status in relation to technical reliability, feasibility of use (fitting in with day-to-day activities), and confidence in how the course meant clinicians could support them. Revisiting Be Mindful also appeared to be generally acceptable to patients, should circumstances mean that a clinician advised them to. However, patients' perception of ease of use and confidence in using Be Mindful appeared be more disparate, and this did not appear to be affected by completion status.

The ‘strongly disagreed’ responses were all from the same patient, and the person who provided negative feedback in the open answer questions and subsequently withdrew from using Be Mindful. This suggests that patients who do not find Be Mindful acceptable could be those who withdraw from the course altogether, and therefore could be identified easily to understand why they did not like the course.

6.2 PATIENT ACCEPTABILITY FOLLOWING COMPLETION OF THE COURSE

Although it was intended to collect survey data for every patient who completed the Be Mindful course, only three patients completed the course. Furthermore, only one (Patient ID FB08) of the three completers returned the patient acceptability survey on completion of the course. Therefore, the data reported in this section has been included for completeness as there are limited trends or generalisable findings which can be inferred.

In addition, this patient (Patient ID FB08) did not complete the survey at both the beginning as well as at the end of the course. As a result, there were also limited comparisons which could be drawn between ‘early thoughts’ and ‘on completion’ thoughts on acceptability of the Be Mindful.

The referral to Be Mindful for FB08 was ‘Clinician-led’ (defined as the patients’ GP or Nurse told them about Be Mindful and referred them), and they either ‘agreed’ or ‘strongly agreed’ with all the statements relating to Be Mindful (Figure 9 below). This indicated that Be Mindful was an acceptable innovation for anxiety and depression from their individual perspective.

This patient reported the elements they most liked about the course were that the videos were easy to watch, and that the course was convenient.

> *“Easy to watch video sessions. Doing course in my own time*.” (FB08)

The two concerns raised by the patient related to repetition of the course content, and the way the course content was delivered.

> *“I thought perhaps there was too much repetition, and maybe video sessions were a bit patronising”* (FB08)

Thus, this individual's feedback indicated that although the format of delivery was considered acceptable, the repetition and tone of content could require re-consideration.

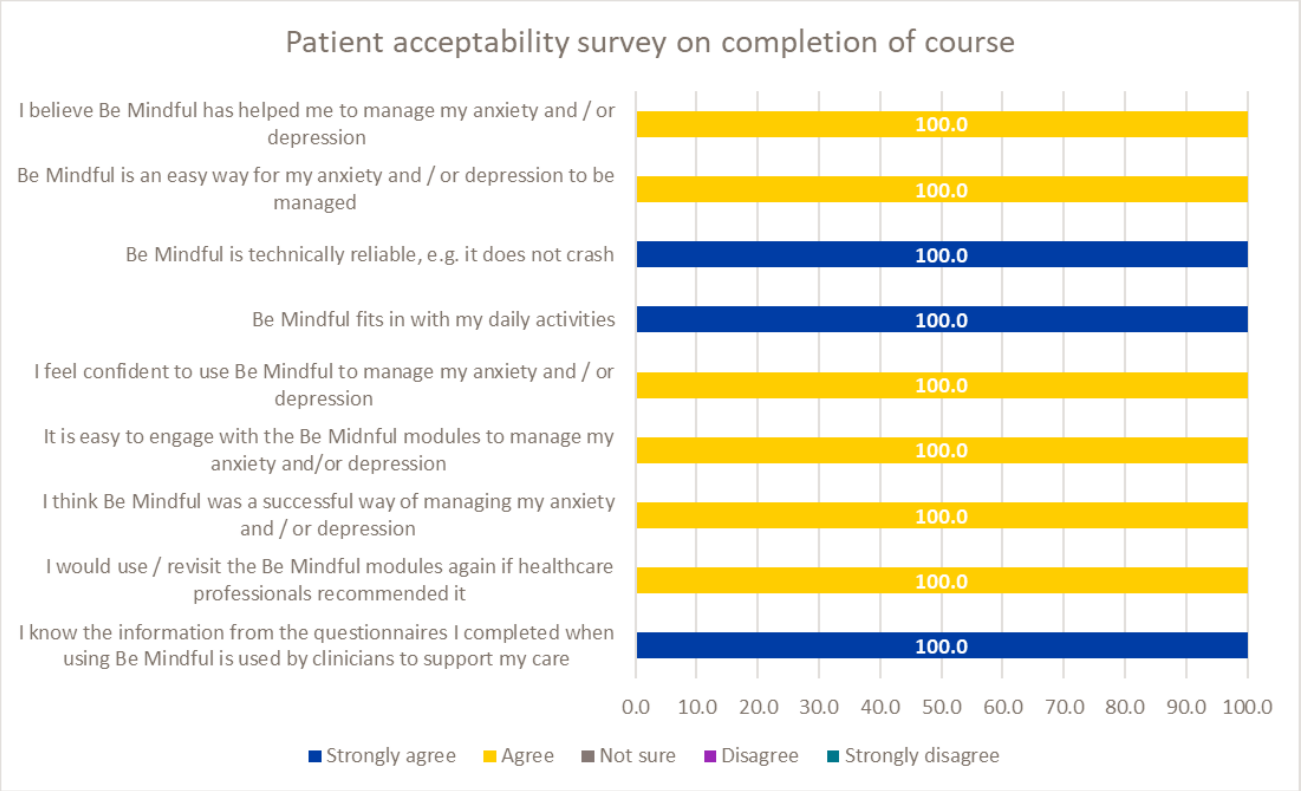

Figure 9. Responses from FB08 to the acceptability survey on completion of the course.

6.3 TRENDS FROM SELF-REPORTED PATIENT SATISFACTION

Table 3 includes the satisfaction ratings for each of the 12 patients who provided at least one satisfaction rating during the course, reported by their course progress level. Importantly, it was not possible to attribute the satisfaction ratings to specific modules or their overall experience at the end of the course, and therefore was not possible to understand whether satisfaction between specific modules varied.

Unsurprisingly, there were no satisfaction ratings provided by 'Never users' (defined as those given a place on the course but who never logged into Be Mindful) or 'Explorer users' (those who have completed the introduction to the course, and who may have also either self-assessed or begun module 1, but who were yet to complete a module).

For the 'Invested users' (defined as those patients who had completed module at least module 1, but yet to complete module 3), patient satisfaction appears to be high. Trends in satisfaction for the 'Near Completers' (defined as those who have completed modules 1, 2 and 3, but yet to complete module 4) appeared to be more varied than for the 'Invested users'. Trends in satisfaction for the 'Completers' (defined as those who have completed module 4) suggest moderately high satisfaction, with less extremes of satisfaction reported than in 'Invested users' and 'Near Completers' groups.

Table 3. Satisfaction rating for each of the 12 patients who provided at least one satisfaction rating during the course according to their completion status'.

Invested users	
Patient ID	**Satisfaction rating: actual rating(s) reported**
FB02	Neutral x 1
FB06	Very happy x 1, happy x 1
FB12	Happy x 1
FB14	Happy x 1, neutral x 1
Near Completers	
Patient ID	**Satisfaction rating: actual rating(s) reported**
FB01	Happy x 3
FB07	Very happy x 1
FB10	Very happy x 1, happy x1, very unhappy x 1
FB11	Neutral x 4
FB13	Happy x2
Completers	
Patient ID	**Satisfaction rating: actual rating(s) reported**
FB03	Neutral x 1
FB08	Happy x 2, neutral x 2
FB09	Happy x 2

Actual satisfaction ratings were reported, with the number of each rating reported when multiple satisfaction ratings were provided.

6.4 STAFF ACCEPTABILITY OF BE MINDFUL

Six staff were interviewed about Be Mindful. Five of the six interview participants were part of Health & Wellbeing teams and all female; one participant was male and a GP.

Two themes were identified that explain staff acceptability of Be Mindful. The full list of staff interview themes is listed in the appendix. **Broadly speaking, the interviewed staff felt the intervention was acceptable** and would use it in the future (see Theme 2 in appendix).

> *"I like having Be Mindful in my pocket, so that's an alternative…cause not everybody likes face-to-face wants to be in a group, so I like to have it in my pocket as another tool to offer." (SB03)*

> *"I would definitely use Be Mindful if the licence were renewed and would continue as a team to talk about the intervention with patients." (SB01)*

However, the level of **acceptability should be considered moderate** due to views on the delivery mechanism of the content, being that it is online and exactly the same for each participant made it inflexible in dealing with patients' reactions to the training. For example, these staff members interviewed shared some patient feedback and the impact of not being able to discuss the course whilst it's running with patients to maintain their interest:

> *"Some of my patients use the word monotone…someone said its boring, someone said not very engaging…it just seems like there's a bit of a lack of charisma that makes it perhaps less relatable, personable to people. (SB02)*

> *"If you were face-to-face in front of a person and you could sense that they might not be liking that idea of mindfulness, you could go to a different approach and not lose them in the moment. Whereas I guess on Be Mindful, if it's losing the patient's interest, there's no way of us [Health and Wellbeing team] knowing that they've lost interest. (SB01)*

It was clear that a **more dynamic and/or flexible approach to content delivery** might offset patient reactions to the content depending on their familiarity with mindfulness and state of readiness for this type of intervention. This staff member provides the best example of these points:

> *"If I was going in blind and I watched the first video, I don't think I would be enraptured. Whereas I've watched, for example, on Future Learn anxiety and CBT workshops and some mindfulness things on there. They are colourful, you know, from the beginning it was quite eye-catching and upbeat. I didn't feel that with the short video that I'd seen at the beginning of Be Mindful, it just felt a bit lacklustre. (SB04)*

In contrast, staff interviewed were **very positive about their access to the Be Mindful platform** to see information on progress. This was key to their sense of acceptability, as described by this staff member:

> *"It's great that we can see who has engaged and what module they've got up to, I think that's really helpful. I think the way they've designed it in terms of our back-office access and what they're trying to teach people is very valuable and useful to us and the patients." (SB02)*

Another important caveat to acceptability was clinician awareness of Be Mindful and its content (see Theme 1 in the appendix). Staff reported they had a **moderate level of awareness of the content of Be Mindful** and this likely impacted on their sense of acceptability, as well as their activities/decisions to introduce Be Mindful to patients. This common theme was best described by this staff member:

> *"Other than the first video, I haven't gone through the whole course myself. I just literally have not had time to do the whole course myself. However, I feel that I know enough to, sort of, be able to tell patients what it's about and be an advocate for it. In an ideal world, I would say it would be great to be able to go through all the intervention. You're putting your trust in something that it's going to be high standard and useful." (SB04)*

7. IMPACT OF BE MINDFUL

The impact of Be Mindful has been assessed in a range of ways which are described in this section on impact. Prior to presenting the quantitative findings, it is important to state that due to limited completers of the intervention during the evaluation timeframe (three completers in total), the qualitative staff interviews had little to reveal about the impact of the course on patients and on practices.

This section on impact is devoted to understanding the impact of the intervention on the three patients who completed the course. This provided important indicative conclusions and demonstrated the potential of Be Mindful to have an impact with patients with low level depression and/or anxiety supported to enrol from general practice settings.

7.1 IMPACT ON CLINICAL OUTCOMES FOR THE THREE COMPLETERS

Prior to discussing the three completers of the course, it was helpful to know the position of all those who started and completed the first baseline assessment for this evaluation cohort. This provides a sense of who was being referred to Be Mindful in terms of their stress, anxiety, and depression levels at the start of the course. It is also helpful to put this into a wider context beyond this evaluation cohort. Table 4 below presents data provided by Be Mindful of the average scores on beginning the course and on completion of the course for all patients referred to Be Mindful from a healthcare setting (defined as healthcare users), collated from all Be Mindful evaluations. Table 5 includes the average PSS, GAD-7, and PHQ-9 scores for the 36 patients in this evaluation cohort who completed the self-assessment prior to beginning the course.

Table 4. Average scores on beginning the course and on completion of the course for healthcare users provided by Be Mindful – data from collated Be Mindful evaluations.

Self-assessment Tool	At beginning of course	On completion of course	Change in score
Perceived Stress Score	25	18	**-7**
Generalised Anxiety Disorder Assessment-7	11	7	**-4**
Patient Health Questionniare-9	12	4.5	**-4.6**

Table 5. Perceived Stress Score, Generalised Anxiety Disorder Assessment-7, and Patient Health Questionnaire-9 for all 36 patients who self-assessed at the beginning of the course.

Self-assessment Tool	At beginning of course (n=36)
Perceived Stress Score	27
Generalised Anxiety Disorder Assessment-7	13
Patient Health Questionnaire-9	15

Data reported as mean.

PSS levels based on score: 0-13 score = low stress, 14-26 score = moderate stress, 27-40 score = high stress.

GAD-7 based on score: ≥5 score = mild anxiety, ≥10 score = moderate anxiety, ≥15 = severe anxiety.

PHQ-9 based on score: 0-4 score = no depression, 5-9 score = mild depression, 10-14 score = moderate depression, 15-19 score = moderately severe depression, 20-27 score = severe depression.

The data in Table 5 above suggests those 36 patients who self-assessed at the beginning of Be Mindful had high perceived stress levels, moderate anxiety, and moderately severe depression. When comparing the PSS, GAD-7, and PHQ-9 scores at the beginning of the course to all healthcare users, using data in Table 4 and Table 5, the current evaluation cohort had higher reported levels of stress, anxiety, and depression at the beginning of the course.

Of the three patients who completed the course, one patient (FB08) appeared to have higher stress levels than the average for the evaluation cohort presented in Table 5 above. Comparatively, the other two patients who completed appeared to have lower stress levels than the average for the evaluation cohort at the beginning of the course. FB08 also appeared to have higher anxiety levels than the average for the evaluation cohort at the beginning of the course, whereas the other two patients appeared to have lower levels of anxiety than average for the evaluation cohort at the beginning of the course. For depression, the three patients who completed the course appeared to have higher (again, FB08) or similar severity of depression to the average for the evaluation cohort at the beginning of the course.

The three patients who completed the course also self-assessed again at the end of the course (see Table 6 below). Each patient had a clinically meaningful reduction in symptoms for at least one of the conditions measured (stress, anxiety, or depression). One patient had a clinically meaningful reduction in symptoms for two conditions (Patient ID FB09), and another had a clinically meaningful reduction in symptoms for all three conditions measured (Patient ID FB08). These observed clinically meaningful changes for the three patients who completed the course were greater than the average change for all healthcare users on Be Mindful's evaluations database (comparison figures provided by Be Mindful in Table 4).

Table 6. Perceived Stress Score, Generalised Anxiety Disorder Assessment-7, and Patient Health Questionnaire-9 prior to beginning and on completion of the course for the three individuals who completed the course.

Perceived Stress Score			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	38	13	**-25***
FB03	16	10	**-6#**
FB09	21	15	**-6^**
Generalised Anxiety Disorder Assessment-7			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	20	4	**-16**
FB03	5	4	**-1**
FB09	16	7	**-9**
Patient Health Questionnaire-9			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	14	1	**-13**
FB03	2	1	**-1**
FB09	12	7	**-5**

Actual score or change in scores reported for each patient.

Colour code: Green = clinically meaningful change based upon minimum clinically important difference (MCID) or a change in 'level' / grouping in the instance a minimum clinically important difference was not available.

MCID: GAD-7 = 4-point reduction; PHQ-9 = 5-point reduction.

PSS levels based on score: 0-13 score = low stress, 14-26 score = moderate stress, 27-40 score = high stress.

**= Reduction in score from a high to low perceived stress level.*

#= Reduction in score from a moderate to low perceived stress level.

^= Reduction in score but no change from a moderate perceived stress level.

One patient (FB08) completed the one-month follow-up post-course self-assessment. The clinically meaningful reductions in stress, and depression symptoms appeared to be maintained post-course, with a reported PSS of 14, and a PHQ-9 of 2 one-month post-course completion. However, it appears that anxiety levels were gradually increasing again one-month post-course, with an increase of more than four, which is equal to the minimum clinically important difference for the GAD-7. Therefore, it can be inferred that with a GAD-7 of 8 one month after course completion, the level of anxiety may have worsened again by a clinically meaningful amount.

7.2 IMPACT ON WORK AND OTHER SOCIAL ACTIVITIES (TERMED FUNCTIONAL IMPAIRMENT)

Alongside these three clinical measures, 36 participants also completed the Work and Social Adjustment Scale at the beginning of the course. Problems sometimes affect people's ability to do certain day-to-day tasks in their lives, and therefore the Work and Social Adjustment Scale asked participants show how much their problem impaired their ability to work, manage their home, undertake social leisure activities, private leisure activities, and form and maintain family and close relationships. Table 7 below includes the average for each question on the scale, plus the total score. This data shows those who self-assessed at the beginning of the course to have at least moderately severe psychopathology, and that as a result their anxiety or

depression was impacting them across all elements of day-to-day life, but most noticeably on work and social leisure activities.

Table 7. Work and Social Adjustment Scale at the beginning of the course.

Scale Question	At the beginning of the course (n=36)
WORK (If you are retired or choose not to have a job for reasons unrelated to your problem, please tick N/A)	5
HOME MANAGEMENT (Cleaning, tidying, shopping, cooking, looking after home/children, paying bills, etc.)	4
SOCIAL LEISURE ACTIVITIES (With other people, e.g., parties, pubs, outings, entertaining, etc.)	5
PRIVATE LEISURE ACTIVITIES (Done alone, e.g., reading, gardening, sewing, hobbies, walking, etc.)	4
FAMILY AND RELATIONSHIPS (Form and maintain close relationships with others including the people that I live with)	3
TOTAL SCORE (Sum of all of scale questions)	21

Individual question scoring: 0 = would not avoid it; 2 = slightly avoid it; 4 = definitely avoid it; 6 = markedly avoid it; 8 = always avoid it; 9 = n/a.

Total score: Above 20 = moderately severe or worse psychopathology (functional impairment); between 10-20 = significant functional impairment (less severe than above 20); Below 10 = sub-clinical functional impairment.

The three patients who completed the course all self-assessed again at the end of the course (see Table 8 below).

All three patients had different work-related impairment scores compared to the evaluation cohort presented in Table 7, and these remained unchanged between the beginning and on completion of the course. Two of the three patients were either retired or not employed for another reason; the other patient reported a low work-related functional impairment score.

The home management scores for the three patients also varied from the average for the evaluation cohort, with two of these patients having lower scores and one having a slightly higher score.

Two of the patients had higher functional impairment related to social leisure activities compared to the average for the evaluation cohort, however, this improved and the post-course scores for these two patients dropped to below the average of the cohort at the start of the course. For the third patient (FB09), this score did increase between beginning and completion of the course, however it should be noted that the 'on completion' score remained below the average for the pre-course scores for the average for the evaluation cohort.

All three patients began the course with lower private leisure activities functional impairment compared to the average for the evaluation cohort, which remained unchanged on completion of the course.

The three patients began the course with similar family and relationship functional impairment compared to the average for the evaluation cohort, which either remained the same or was improved on completion of the course.

Overall, the total score for functional impairment either improved or stayed the same for the three patients who completed the course. This indicated that Be Mindful may positively impact functional impairment of patients, in particular for domains of home management, social leisure activities, and family and relationship impairments.

Table 8. Work and Social Adjustment Scale prior to beginning and on completion of the course for the three individuals who completed Be Mindful.

WORK **(If you are retired or choose not to have a job for reasons unrelated to your problem, please tick N/A)**			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	9	9	**0**
FB03	9	9	**0**
FB09	1	1	**0**
HOME MANAGEMENT **(Cleaning, tidying, shopping, cooking, looking after home/children, paying bills, etc.)**			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	5	3	**-2**
FB03	6	1	**-5**
FB09	1	1	**0**
SOCIAL LEISURE ACTIVITIES **(With other people, e.g., parties, pubs, outings, entertaining, etc.)**			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	6	3	**-3**
FB03	6	2	**-4**
FB09	1	2	**1**
PRIVATE LEISURE ACTIVITIES **(Done alone, e.g., reading, gardening, sewing, hobbies, walking, etc.)**			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	2	2	**0**
FB03	0	0	**0**
FB09	1	1	**0**
FAMILY AND RELATIONSHIPS **(Form and maintain close relationships with others including the people that I live with)**			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	2	0	**-2**
FB03	2	2	**0**
FB09	3	2	**-1**
TOTAL SCORE **(Sum of all of scale questions)**			
Patient ID	**At beginning of course**	**On completion of course**	**Change in score**
FB08	24	17	**-7***
FB03	23	14	**-9#**
FB09	7	7	**0^**

Actual score or change in scores reported for each patient.

Higher scores = higher impairment in functioning day-to-day.

Colour code: Green = reduction in score; orange = no change in score; red = increase in score.

Total score: Above 20 = moderately severe or worse psychopathology (functional impairment); between 10-20 = significant functional impairment (less severe than above 20); Below 10 = subclinical functional impairment.

= Reduction in score from a moderately severe or worse psychopathology to significant functional impairment (less severe than above 20).

#= Reduction in score from a moderately severe or worse psychopathology to significant functional impairment (less severe than above 20).

^= No change from a sub-clinical state, remains in a sub-clinical state.

This scale was not completed at the one-month follow-up self-assessment by FB08, therefore it was not possible to determine whether the improvements in functional impairment were sustained.

7.3 IMPACT ON PATIENT ACTIVATION LEVELS

Although it was intended to collect PAM survey data for every patient at the beginning of and on completion of the Be Mindful course, little survey data was available relating to patient activation at the beginning of and on completion of the Be Mindful course. As a result, the data reported in this section has been included for completeness, and trends in the findings have been inferred with few generalisable conclusions drawn.

Five patients completed the PAM survey via the MS Forms link provided at the beginning of the course. Only one (FB03) of the five patients who completed the PAM at the beginning of the course completed the Be Mindful course. Only one (FB08) of the three patients who completed the Be Mindful course also completed the PAM on completion of the course. No patients completed the survey at both the beginning as well as at the end of the course. Table 9 below includes the PAM level and scores according to each patient.

Table 9. Patient Activation Measure levels and scores at the beginning of and on completion of the course according to each patient.

Patient ID	At the beginning of the course		On completion of the course	
	Level	Score	Level	Score
FB01	2	53.20	-	-
FB03	2	53.20	-	-
FB05	1	47.00	-	-
FB06	3	65.50	-	-
FB07	3	70.20	-	-
FB08	-	-	4	72.50

The PAM levels and scores for the five patients at the beginning of the course indicate these patients had variable knowledge, skills, and confidence in themselves to manage their own health and care.

FB05 was a PAM level 1, defined as someone 'disengaged and overwhelmed'. This patient completed the introduction, but remained on 'Module 1, day 1', progressing no further through the modules, with no activity on the Be Mindful course since 04/05/2022. This was a patient who reported they 'strongly agreed' or 'agreed' with all the patient acceptability question presented in Figure 8 in section 6.1, and had no concerns, reported problems, or suggestions for improvements. Therefore, despite having high stress and severe depression (at beginning of course: PSS = 29; GAD-7 = 10; PHQ-9 = 21) and would potentially have clinically benefitted from Be Mindful, the PAM data may indicate that patient with too low level of activation (level 1) may be too disengaged and overwhelmed to be able to undertake a course such as Be Mindful regardless of their perceived acceptability.

FB01 and FB03 were a PAM level 2, defined as someone 'becoming aware but still struggling'. FB01 completed the induction, and modules 1 to 3, however progressed no further than 'Module 4, day 1', with no activity on the Be Mindful course since early June 2022. FB01 was a patient who reported 'not sure' or 'agree' to the patient acceptability questions presented in Figure 8 in section 6.1 and did not offer any

responses to the open answer questions regarding perceived concerns, problems, or suggestions for improvement. They appeared unsure at the beginning of the course of how acceptable Be Mindful was, despite presenting with high stress, severe anxiety, and moderately severe depression (at beginning of course: PSS = 32; GAD-7 = 17; PHQ-9 = 17). FB03 was one of the three patients who completed the whole course. This was a patient who reported a range of responses to the patient acceptability question presented in Figure 8 in section 6.1 from 'disagree' to 'agree', and that they were having some difficulties navigating Be Mindful. Therefore, despite operability issues reported by FB03, and their initial acceptability being unclear for these two patients, these data suggest patients with a PAM level 2 score may be sufficiently aware and engaged to undertake a course such as Be Mindful.

FB06 and FB07 were a PAM level 3, defined as someone 'taking action and gaining control'. FB06 completed the introduction, and modules 1 and 2, however progressed no further than 'Module 3, day 2', with no activity on the Be Mindful course since late May 2022. FB07 completed the introduction, and modules 1 and 2. This patient was currently on 'Module 3, day 3', and appeared to still be actively completing the modules. Both FB06 and FB07 reported either 'agree' or 'strongly agree' to all the patient acceptability questions presented in Figure 8 in section 6.1. Therefore, similar to those of PAM level 2, patients with a PAM level 3 may be sufficiently active taking control of their health and care to begin and complete some modules of a course such as Be Mindful.

In summary, the trends from the available data suggest that a PAM level 2 and above at the beginning of the Be Mindful course to be sufficient for patients to engage with Be Mindful, but that a PAM level 1 could be too 'disengaged and overwhelmed' to partake.

The PAM level score for the FB08 which was a PAM level 4. This is highest PAM level and defined as someone 'maintaining behaviours and pushing forward'. This score was the only available PAM level score on completion of the course. This patient had a clinically meaningful reductions in symptoms for stress, anxiety, and depression, and their perceived acceptability was high as they either 'agreed' or 'strongly agreed' with all the patient acceptability questions (Figure 9 in section 6.2). As there was no PAM level at the beginning of the course to compare to, it is unclear whether the Be Mindful course increased this patient's PAM level, or whether this patient began the course as a PAM level 4.

To summarise, PAM level 1 patients may be too disengaged and overwhelmed to undertake the course; however, PAM level 2 and above patients may be sufficiently actively taking control of their health and care to engage with the Be Mindful course. These trends therefore indicate PAM could be a useful tool for clinicians to assess patients' appropriateness to be referred to Be Mindful.

7.4 COMPREHENSIVE IMPACT ASSESSMENT: CASE STUDIES FOR BE MINDFUL COURSE COMPLETERS

The three patients who completed the Be Mindful course have been presented as cases below to enable a comprehensive impact assessment to be undertaken for each patient. The data included in the cases has been derived from a range of sources. These included patient satisfaction metrics from the Be Mindful portal, patient acceptability surveys, PAM surveys, clinical impact outcomes as well as the practice data extraction with the extended demographic information. The completeness of the data available varied for the cases across ranges of the data sources.

7.4.1 CASE 1: FB03 - HIGHLY MEANINGFUL IMPACTS ON SOME OUTCOMES AND OVERALL ACCEPTABLE AND SATISFIED

This patient was a female patient aged 69 years registered at Practice A. She was British, and in the least deprived decile in the UK (Index of Multiple Deprivation: decile = 10, rank: 30946) and diagnosed with (and actively living with) depression and anxiety. Her first recorded episode of depression was over 20 years ago

and had three long-term conditions. She was currently taking two medications, one of which was for depression. She had had no 'not fit for work notes' in past year and had had three appointments in last year.

This patient completed the PAM at the beginning of the course only, and was a PAM level 2 (score: 53.20). This indicated this patient was 'becoming aware but still struggling'; however, as there was no post-course level to compare to, it is unclear whether this is improved or remained the same.

Similarly, acceptability levels were only available at the beginning of the course. Nonetheless, this patient felt this course was overall acceptable, reporting either not sure or agree to all but one question (which they disagreed about ease of use of Be Mindful). These overall feelings towards acceptability were corroborated by their reported satisfaction level (reporting feeling neutral) about the course.

This patient had highly meaningful impacts on one clinical outcome and on their functional impairment, with reduced perceived stress (PSS change = 6) and reduced functional impairment (WSAS total change = 9), but no meaningful impacts on anxiety (GAD-7 change = 1) or depression (PHQ-9 change = 1) levels.

To summarise, this female patient had been living with both anxiety and depression for a significant period of their life (over 20 years), and who despite the course not impacting their depression and anxiety levels, did appear to have some meaningful impacts (reduced functional impairment, and perceived stress levels). This case demonstrated that older patients with a low level of deprivation can complete the course.

7.4.2 CASE 2: FB08 HIGHLY MEANINGFUL IMPACTS ACROSS THE BREADTH OF OUTCOMES AND OVERALL HIGHLY ACCEPTABLE AND SATISFIED

This patient was a female patient aged 73 years registered at Practice C. She had no ethnicity recorded, and in the least deprived decile in the UK (Index of Multiple Deprivation: decile = 10, rank: 32654) and diagnosed with (and actively living with) depression. Her first recorded episode of depression was in the last few years and had three long-term conditions. She was currently taking 12 medications, one of which was for depression. She had no 'not fit for work notes' in past year and had attended 24 GP appointments in the last 12 months.

This patient completed the PAM on completion of the course only and was a PAM level 4 (score: 72.50). This indicated this patient was maintaining behaviours; however, as there was no pre-course level to compare to, it is unclear whether this is an improvement, or a patient who was already in this state of activation.

Similarly, acceptability levels were only available on completion of the course. Nonetheless, this patient felt this course was highly acceptable, reporting either agree or strongly agree to all questions. These feelings towards acceptability were corroborated by their reported satisfaction levels (reporting either feeling happy or neutral), and were also reflected in the highly meaningful impacts on clinical outcomes and functional impairment, with reduced perceived stress (PSS change = 25), reduced anxiety (GAD-7 change = 16), reduced depression (PHQ-9 change = 13), and reduced functional impairment (WSAS total change = 7)

To summarise, this female patient had been living with depression for short period of their life and had highly meaningful improvements in their depression, anxiety, and perceived stress levels, as well reduced functional impairment following completion of the Be Mindful course. This case also showed that older patients with a low level of deprivation can complete the course.

7.4.3 CASE 3: FB09 HIGHLY MEANINGFUL IMPACTS ON SOME CLINICAL OUTCOMES AND OVERALL SATISFIED

This patient was a male patient aged 43 years registered at Practice A. He was white British, and in the fourth most deprived decile in the UK (Index of Multiple Deprivation: decile: 4, rank: 12318) and diagnosed with (and actively living with) anxiety. His first recorded episode of anxiety was in the last few years and had three

long-term conditions. He was currently taking no medications and had no 'not fit for work notes' in the past year. He had attended one GP appointment in the last 12 months.

Although this patient did not complete the PAM or the acceptability survey at the beginning of or on completion of the course, this patient did report that they were 'happy' with the Be Mindful course on two feedback occasions. This patient completed the self-assessment at the beginning of and on completion of the course. This patient was found to have no change in perceived stress levels (PSS change = 6) or functional impairment but did have reduced anxiety (GAD-7 change = 9) and depression (PHQ-9 change = 5) levels.

To summarise, this male patient had been living with anxiety for short period of their life and, despite the course not impacting their functional impairment or perceived stress levels, his depression and anxiety levels were reduced by highly meaningful amounts. This case showed that patients from a more deprived background can complete the course.

8. IMPLEMENTATION OF BE MINDFUL

HIOW ICB commissioned Be Mindful and Wessex AHSN was appointed as a delivery partner to support implementation and to independently evaluate Be Mindful specifically within several primary care practices as part of the Demonstrator programme.

In addition, practices themselves were involved in the implementation of Be Mindful as they operationalised the use of its functions to suit their specific practice needs. This section reflects on findings related to actions taken, where available, by all three entities involved in the implementation.

In relation to Wessex AHSN and ICB support, staff interviewed indicated they were pleased with the level of implementation support offered, as described by this staff member:

> *"There didn't seem to be much of a delay in reaching out to people and [Wessex AHSN] doing the webinars with us…it seemed timely…and every time we've contacted the Wessex team, they've always been very quick to respond. From my experience and I think the team would agree with me the communication between us [practice and Wessex AHSN deployment team] has been very good." (SB01)*

Three themes about the implementation of Be Mindful were identified.

The first relevant theme indicated practices' **organisation of enrolments was managed slightly differently** (Theme 3 in Appendix). Three of the four practices used a Health and Wellbeing team of health coaches to introduce and manage enrolments and also had a pre-existing (but paused) face-to-face self-developed mindfulness intervention. One practice referred/enrolled patients directly from GP appointments, with practice administrative support to enrol patients, and did not have their own mindfulness intervention. The impact of these arrangements was seen in the number of enrolments on Be Mindful. The latter practice had significantly fewer enrolments, suggesting the involvement of the Health and Wellbeing team was a positive factor in implementation. It was also clear the latter practice was less organised and internally ready, as described by this staff member:

> *"Have we done a whole education session on Be Mindful as an option to the whole practice? No. That might be useful." (SB05)*

At the other practice using the Health and Wellbeing coaches, several had direct experience of mindfulness-based interventions and been trained to use them. This also made it more likely to refer to Be Mindful, as reported by this staff member:

> *"I think out of everybody I refer the most…because I've got the mindfulness mindset. So when I'm working with somebody, I'm very mindful." (SB03)*

The second relevant theme indicated there were several influences on the introduction of Be Mindful (Theme 4 in Appendix). Firstly, it was considered **moderately difficult to 'sell' to patients** during the clinical encounter:

> *"I think for me it's quite difficult to sell a program as we know very little about the content and also upon viewing the first section, we were a little bit anxious as to whether our patients would feel the same or want to engage with it." (SB01)*

Furthermore, staff had **concerns about how the introduction of Be Mindful would reflect upon them** if it were to the wrong patient or the patient had a negative reaction to the course.

> *"If we're suggesting it must be good…the flip side of that is if they're not very impressed or don't want to engage, or for whatever reasons they pull out – it will affect our relationship with the patient for suggesting it and also when recommending other avenues of self-management." (SB01)*

To offset these concerns, staff in Health and Wellbeing teams indicated they **often explored patients' openness to mindfulness interventions** generally. This would allow them to judge if the intervention might be taken up by the patient.

> *"In terms of introducing…I talk about mindfulness with the majority of people that I work with to see if they're open to it…it could be in a second visit or third visit. I find some patients just are not able to identify their thoughts, it's all about the physical symptoms. I think there are some people that are not appropriate [for Be Mindful]…if people are extremely heightened in their anxiety and just feel very overwhelmed. They don't want to be referred. Or they prefer face-to-face support, or they don't have the technology or maybe a phone or the internet, or don't want an app, or they're quite unwell, or not self-driven." (SB03)*

The third relevant theme indicated patients held preferences about Be Mindful (Theme 5 in Appendix). These preferences were described by staff as **many patients preferring face-to-face intervention**:

> *"Let's just say I refer to 10, I would say that most likely 7 would prefer a face-to-face intervention. I think it's because I've built a relationship with them. I've met them, they feel comfortable with me perhaps and think yes, I could do that with that lady." (SB03)*

Also, patients had preferences about the email reminder system (see Background section 1.2), which are prompts to continue with the intervention, organised by the Be Mindful platform. Most staff reported **patients had felt the reminder emails were too constant**, as described by these staff:

> *"Two different patients said they felt harassed by the amount of emails prompting them. I know it's done as like an engagement tactic, but I think for some people it felt like it was a bit too much…that's put some people off and they actually use the word annoying." (SB02)*

> *"Those emails keep coming through where they felt that they could work through something on their own, the reminders just felt like a stress to them…I think that might be why patients were closing the door on it…because it feels like it's too much pressure." (SB03)*

It was clear from the themes above that staff and patients' preferences combined to indicate there was a need for a **hybrid approach** (human clinician and digital solution) to support digital self-care in the context of low-level depression and/or anxiety. Patients often required careful introduction to the intervention and support during the intervention to keep going, as described by these staff:

> *"We could maybe say to the patient, you know, you might not, you know feel that's for you right at the start but stick with it and you know and work through the modules because it is of benefit. So try and almost pre-empt the fact that they might get put off at start but to encourage them." (SB01)*

> *"If you think about people that have never heard of mindfulness, have never done anything like that, […], so when I talk to patients I talk them through it, we have a good conversation about it and I say stick with the program, you'll be doing body scans, you'll be doing breathing, and that can feel a little bit out there if you're brand new to mindfulness…it's knowing that have you pre-warn patients." (SB03)*

> *"The patient is supposed to just engage with this and then benefit from it hopefully but it's not that simple. They still might need a fair amount of support or still be coming back to you anyway for other*

reasons. I think it's good to have periodic contact with us [Health and Wellbeing team] so we can offer to go through something in more detail and make it more personal." (SB04)

In summary, when considering the themes identified, the implementation of Be Mindful was achieved in all four practices; however, the degree to which it was implemented varied. Furthermore, several challenges to its implementation were identified and this helps to explain the extent of use.

9. SUMMARY OF LESSONS LEARNED

Lessons learned were identified from all data sources. These are presented as lessons learned for HIOW ICB to support practices, practices to support their staff and patients, and those lessons learned relevant to Wellmind Health directly.

9.1 LESSONS LEARNED FOR HIOW ICB TO SUPPORT PRACTICES

1. It was apparent that Health and Wellbeing teams were well-placed to introduce, enrol and support patients as they work through the Be Mindful course over several months. As different practices used different models, it may be helpful for the ICB to highlight Health and Wellbeing teams (or similar) as the first approach to promoting enrolments to and supporting patients to work through Be Mindful.
2. Staff and patients' preferences combined to indicate there was a need for a hybrid approach (human clinician and digital solution) to support digital self-care in the context of low-level depression and/or anxiety. Staff felt patients often required careful introduction to the Be Mindful course to explain mindfulness and someone to discuss progress with.
3. A hybrid approach was also considered valuable to support patients during the intervention to keep their engagement with the course going. It may be helpful for the ICB to recommend Be Mindful be operationalised in conjunction with human support.
4. Based upon the trends in the PAM data, it may be valuable for the ICB to share intelligence between practices to support practices to determine their internal triaging decisions for which patients may be suitable and appropriate to refer for the Be Mindful course, due to the intervention being digital and self-care in nature. For example, PAM level 1 patients may be too disengaged and overwhelmed to undertake the course, whereas PAM level 2 and above may be more likely to engage with the Be Mindful course.
5. Given the usage of Be Mindful over time was low, the ICB may wish to consider recommending other well-placed services to refer patients to the Be Mindful course. For example, the Be Mindful course may be of value to CMHT, talking therapy services, voluntary sector or listening service partners, or services which support patients with long-term conditions (Mental health and long-term conditions: the cost of co-morbidity | The King's Fund (kingsfund.org.uk). Be Mindful could be an intervention that acts as a short-term solution whilst waiting for formal assessments from e.g., CMHT or talking therapy, or it could be an offer to patients accessing voluntarily sector listening services, or as an intervention to offer alongside condition-specific treatments for people living with long-term conditions – which are known to be associated with higher likelihood of mental illness.

9.2 LESSONS LEARNED FOR PRACTICES TO SUPPORT THEIR STAFF

1. Health and Wellbeing teams have referred/enrolled more patients and have the time and ability to navigate patients concerns during and after the enrolment point. It would be beneficial to consider their (or similar) involvement in the implementation of Be Mindful.
2. Due to 60% of patients failing to get beyond the introduction section of Be Mindful, who is referred should be given careful thought. For example, PAM level 1 patients may be too disengaged and

overwhelmed to undertake the course and using the PAM to identify these patients could support decision making.

3. Practices could adopt a hybrid model (human clinician and digital solution) to support digital self-care in the context of low-level depression and/or anxiety. Be Mindful should not be considered by clinicians as a simple self-referral solution. Further exploration of what a hybrid model is in practice is required (e.g., does the human input need to be from a clinician and does it need to be face-to-face, does it need to be instigated by the clinician or the patient, when and how do check-ins need to happen).
4. Two of the three completers were over 68 years old and all three were over 43 years old. As a result, it may be important for practices to ensure staff do not assume too much about age or digital ability before speaking with patients about their willingness to engage with mindfulness-based or digital interventions.
5. The email reminder system, organised by Be Mindful, was considered too constant for patients who are already anxious or depressed. It is possible a practice-delivered reminder system or joint practice / Be Mindful system would be more effective at prompting patients at the right time. This would also offer the opportunity for the reminders to be sent to the patient based on a customised level of support identified for individual patients from someone with whom they already have an existing rapport and for the clinician to use this as a mechanism to check-in with patients, or for the reminders to be sent from Be Mindful at the frequency determined by the patient.
6. In terms of practice-led implementation activities, they should consider the communication channels when a practice / PCN is spread across several locations and with a wide range of staff. Practices could consider appointing a champion and consider mental health colleagues' involvement even if they are linked to crisis work which Be Mindful would not be suited to, as they could be the natural fit for owning this work and supporting practice staff to feel more confident when explaining the course content to patients.
7. There are many meetings and groups within the governance of a practice, and communications can be lost between groups and/or be disseminated via email and lost in the busy nature of post-pandemic general practice. It may be worth considering a permanent agenda item about new innovations being assessed at the practice at one of the senior management meeting, or a new group or innovation committee, to oversee the deployment and support any evaluation activities ongoing. This would ensure that new innovations are known practice wide and do not fall off the radar, resulting in wasted time and resources for all stakeholders.

9.3 LESSONS LEARNED FOR PRACTICES TO SUPPORT THEIR PATIENTS

1. Patients can fall into several categories of 'user': Never users, Explorer users, Invested users, Near Completers, and Completers. Further investigation of these groups, e.g., their demographic and clinical characteristics, would benefit clinician decision-making about new enrolments and subsequent analyses of impact.
2. Practices could ensure patients are aware of the app interface for ease of use on mobile phones as well as the web platform. This may mean more patients are able to engage or remain engaged with the course as they would be able to self-select the most appropriate interface for themselves.

9.4 LESSONS LEARNED FOR BE MINDFUL AND WELLMIND HEALTH

1. Nuances of how patients go through the course were not able to be identified from the data captured by the Be Mindful portal, e.g., which videos patients watched and then revisited etc. This is important as without this understanding of how patients navigate and work through the course, it is difficult for practices to know when and how to best offer support to their patients. It is

recommended that more data capture functions are built into the Be Mindful platform to benefit the platform developers and clinicians.

2. Wellmind Health may wish to review the data available from portal exports. For example, patients were asked to rate their satisfaction on a Likert scale (very helpful, helpful, neutral, not helpful, very unhelpful) per module and on completion of the whole course; however, only an average satisfaction rating was available via the dashboard and data exports. Following discussion with Wellmind Health, the individual ratings were possible to export, but were only available as a count (e.g., number of times each patient reported a satisfaction rating of happy). These counts unfortunately could not be attributed to the module or overall satisfaction at the end of the course. This meant that for this evaluation, it was challenging to understand patient satisfaction in a meaningful, informed way in relation to the different course modules and ensure appropriate inferences were drawn.
3. A review of the email reminders may avoid patient perceptions of being overly burdened whilst already feeling anxious or depressed. If possible, a joint solution with clinicians would be preferrable and likely to help course completion by contacting patients based on live information from clinicians and possibly having the reminder come from the clinician, as the relationship and rapport already built with the clinician will potentially be more encouraging.
4. On the reminder email to patients, it states: 'Unsubscribe - Please just reply to this email to request withdrawal from the course.' Wellmind Health could consider including more unsubscribe options, such as unsubscribe from the course completely, unsubscribe from the email reminders, unsubscribe from the emails reminders for one week, for two weeks etc. This would offer the patient the chance to disengage for legitimate reasons (e.g. at crisis point) and re-engage (e.g. via a function on the platform) without being automatically prompted at highly stressful or anxious times.
5. Wellmind Health may wish to consider a more dynamic presentation of the intervention and content during the intervention for healthcare professionals. This may enable healthcare professionals to have greater confidence in the information they provide to patients, and as a result lead to more referrals to the course.
6. Wellmind Health may wish to consider a more flexible course structure, e.g. so patients can visit mindfulness activities such as the body scan when they wish. This would also be valuable when considering the video content, to ensure the videos are delivered in a more accessible way for patients.

10. CONCLUSIONS

In summary, the impact of Be Mindful for those that completed it was positive. It was perceived by staff as having great potential to support low-level depression and anxiety in general practice settings, but also perceived to have a range of content, delivery, and implementation challenges. It appeared to be more effective when managed by Health and Wellbeing teams, but a range of challenges were identified which would benefit from being addressed. Lessons learned for the ICB, practices, and the developers are outlined in the section above and if addressed may improve enrolment and completion rates.

Prior to presenting conclusions specific to each evaluation question, a key overall conclusion has been drawn to optimise the model of Be Mindful delivery in general practice. It is proposed that a hybrid implementation approach should be considered going forward. Health and Wellbeing teams (or similar) would be well-placed staff members, as 'experts' and/or 'champions' within practices, who could ensure appropriate triaging of patients prior to referrals being made, and then support patients to complete the modules and provide reminders as needed. This could address the different ways of working between practices found in this evaluation and offer a solution to the challenges of introducing the Be Mindful course. It may also support general practice to unleash the potential of Be Mindful as a digital self-care innovation.

Each evaluation question has been considered and conclusions drawn based upon the synthesised findings presented in this report.

10.1 EVALUATION QUESTION 1: TO WHAT EXTENT AND VARIATION HAS BE MINDFUL BEEN UTILISED BY THE FOUR DEMONSTRATOR PRACTICES?

Across all the Demonstrator practices, 70 patients were enrolled on the Be Mindful platform between 22nd February and 11th July 2022. Despite an intense start by one practice to enrol patients, introductions to the intervention were 'little and often' over the timeframe. This is understandable due to the need for clinically appropriate introductions and varying patient reactions to being offered a mindfulness-based intervention.

Practice-level variation in usage was limited, but course progress and completion levels varied across the total patient group. Five categories of user were identified and 13 out of 70 (18.6%) were 'Never users' (i.e. they never logged into the platform), 29 out of 70 (41.4%) were 'Explorer users', 20 out of 70 (28.6%) were 'Invested users', five out of 70 (7.1%) were 'Near Completers', and three out of 70 (4.3%)) were 'Completers'.

Most patients (67 of 70) enrolled on the platform never completed the course within the evaluation timeframe. This raises the question about why the course was not completed by those who were initially interested, and whether the appropriate patients were being referred. It may be that many patients were young (many aged between 20-49 years old) and assumed to be more technically aware of how to use an online intervention; however, with hindsight it may be that the older patients were more likely to complete the course due to the degree of maturity needed for a mindfulness course.

When considering the extent and variation of usage across the four practices in relation to their individual profiles, digital maturity did not appear to have influenced patient completion (Practice A had the lowest maturity but was the practice with the highest enrolments).

Furthermore, very limited ethnic diversity across participating patients (course completers and survey completers were all ethnically white British) was apparent which meant it was not possible to ascertain whether Be Mindful is appropriate or acceptable to patients with differing ethnic backgrounds.

10.2 EVALUATION QUESTION 2: WHAT IMPACT HAS BE MINDFUL HAD ON SERVICE USER CARE?

All three patients who completed the course had reductions on the three key outcomes the intervention targets: anxiety, depression, and stress. Furthermore, all had a clinically meaningful reduction in symptoms for at least one of the conditions measured (stress, anxiety, or depression). One patient had a clinically meaningful reduction in symptoms for two conditions, and another had a clinically meaningful reduction in symptoms for all three conditions measured. These observed clinically meaningful changes for the three patients who completed the course were greater than the average change for all healthcare Be Mindful users.

Impact on work and social activities was also assessed pre and post intervention and identified either improvements or no change for the three patients who completed the course. This indicated that Be Mindful may positively impact functional impairment of patients, in particular for domains of home management, social leisure activities, and family and relationship impairments.

Whilst an impact on patient activation was not possible due to limited course completers, the trends from the available data suggest that PAM level 1 patients may be too disengaged and overwhelmed to undertake the course, however PAM level 2 above patients may be actively taking control of their health and care to engage with Be Mindful. These trends indicate measuring PAM would be a useful tool for referring clinicians to assess patients' appropriateness to be referred to Be Mindful.

Interviews with staff reported limited perceived impacts on patient care with the caveat that they were unable to judge impact due to limited throughput of patients and feedback from patients who completed the course.

10.3 EVALUATION QUESTION 3: TO WHAT EXTENT IS BE MINDFUL ACCEPTABLE, APPROPRIATE, USED AS INTENDED, FEASIBLE AND SUSTAINABLE FOR SERVICE USERS?

Patient perceptions of Be Mindful were mixed, with only half of the patients agreeing that Be Mindful would help them to manage their mental health condition, and slightly under half agreeing that it was an easy way to manage their anxiety and / or depression. Overall, Be Mindful was viewed as moderately implementable by patients in its current format in relation to acceptability, appropriateness, use as intended, feasibility and sustainability, regardless of completion status. Some elements such as the delivery methods and the feasibility to complete the course around day-to-day life were found to be positive, but some patients reported the content itself to be long-winded, wooden, and boring. Given that all three completers were from the practices operating Health and Wellbeing teams, this may offer one implementation solution to better identify patients best suited to the Be Mindful intervention.

In terms of staff acceptability, this should be considered moderate at present due to several challenges reported. No criticism of its clinical appropriateness was reported, but staff awareness of the content of the course was limited and the delivery of the course was considered inflexible and requiring more dynamic delivery to engage a range of patient preferences and appreciate patients' prior awareness of mindfulness-based interventions. In contrast, staff were very positive about their access to the Be Mindful platform and found this an important tool for understanding progress, albeit only with a few patients in the context of this evaluation.

Practices took decisions to deploy Be Mindful in slightly different ways, either through Health and Wellbeing teams or through GP consultations. The former approach led to more enrolments and completions of Be Mindful.

Practice staff reported Be Mindful was moderately difficult to 'sell' to patients due to their own limited awareness of the course content in detail, but also due to the need to explore patients' openness to mindfulness interventions, hearing that many patients preferred face-to-face intervention and patient reports of feeling overly burdened by the reminder emails to keep going with the intervention.

It was clear that patients enrolled were not in crisis, but they did require support for low-level depression and/or anxiety. This meant that a hybrid approach (human clinician and digital solution) was necessary to manage queries about the intervention during and after enrolment. This was best operationalised through the Health and Wellbeing teams and their familiarity with mindfulness-based interventions.

In summary, when considering the themes identified, the implementation of Be Mindful was achieved in all four practices; however, the degree to which it was implemented varied.

10.4 EVALUATION QUESTION 4: WHAT IMPACT HAS BE MINDFUL HAD ON THE EFFICIENCY OF ANXIETY AND DEPRESSION SERVICES AT THE PRACTICES?

Due to the low number of enrolments within the evaluation timeframe, staff interviewed did not report any efficiencies at the practices because of the introduction of Be Mindful at this present time. This question should be explored in further evaluations of Be Mindful and considered in the context of the range of other interventions, e.g., italk, and how other services highlighted in section 9.1 may also use this course.

10.5 EVALUATION QUESTION 5: HOW HAS BE MINDFUL IMPACTED ON STAFF AND RELATED SERVICES?

Due to the low number of enrolments within the evaluation timeframe, staff interviewed did not report impacts upon other staff or related services. This question should be explored in further evaluations of Be

Mindful and considered in the context of the range of other interventions, e.g., italk, and how other services highlighted in section 9.1 may also use this course.

10.6 EVALUATION QUESTION 6: WHAT LESSONS CAN BE DRAWN FROM THE EXPERIENCE OF PARTICIPATING IN A DEMONSTRATOR PROJECT?

Staff interviewed indicated they were pleased with the level of implementation support offered, as part of the Demonstrator programme. It is reasonable to surmise that Wessex AHSN and ICB involvement helped to encourage enrolments onto Be Mindful, even though they were low overall, for an intervention that is perceived as having a range of challenges to its deployment.

In summary, based on the successes of the three patients who completed the course, the positive potential of Be Mindful to be unleashed was indicated. This is assuming the intervention can be managed by Health and Wellbeing teams (or similar), if referrals are thought through carefully, if the delivery mechanisms can be made more flexible and engaging, if automatic course progress reminders are reconsidered, and a more hybrid (human clinician and digital intervention) approach to digital self-care can be achieved.

APPENDIX – QUALITATIVE STAFF INTERVIEWS SUPPLEMENTARY MATERIAL

Six staff were interviewed about Be Mindful. Five of the six interview participants were part of Health & Wellbeing teams and all female; one participant was male and a GP. Written informed consent was obtained prior to the interviews and all were audio-recorded to support the analysis.

The questions asked during the staff interviewed were structured upon a framework about the implementation of digital innovation - Hermes et al., (2019). These factors are described in the table below. By inviting discussion on these eight factors, a rounded assessment of 'successful implementation' would be gained and based upon a comprehensive and evidence-based theory.

'Successful implementation' factors	**Description**
Acceptability	Perception among stakeholders that it is useful
Adoption	Intention, decision, initiation to use it
Appropriateness	Perceived fit, relevance, compatibility
Fidelity	Intervention used as intended
Feasibility	Retrospective knowledge of success/lack of success within the context
Implementation cost	Direct costs of implementation strategy
Penetration	The integration of a practice within a service setting and its subsystems
Sustainability	Maintained, institutionalised, or integrated within a service setting

An inductive thematic analysis of the staff interviews, using the Braun & Clarke (2006) method, was conducted with staff at four practices. Themes and sub-themes are presented in the table below.

	Theme and sub-themes
1	Clinician awareness of Be Mindful
2	Moderate acceptability of Be Mindful • Inflexible delivery mechanism • More dynamic content delivery • Positive view on the Be Mindful platform to access information on progress
3	Internal organisation to operationalise Be Mindful
4	Influences on the introduction of Be Mindful • Selling Be Mindful to patients • Exploring patient openness to mindfulness interventions
5	Patient preferences and reactions to Be Mindful • Face-to-face intervention still a preference for many patients • Constant follow up emails • Need for a hybrid approach (human clinician and digital solution) to support patient care
6	No perceived impact on patients to date – due to low completion rate
7	No perceived impact on practices to date – due to low completion rate

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