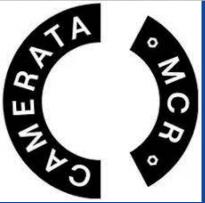
# **Music in Mind Evaluation**

Final Report

**Prof Axel Kaehne** 

December 2024









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Healthcare Analytics (HCA)

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# **Executive Summary**

#### Music in Mind Programme - Objectives and Significance

The Music in Mind programme, developed by the Manchester Camerata and its subsidiary, Music in Mind Remote Ltd., is an innovative initiative designed to harness the therapeutic power of music to improve the lives of people living with dementia (PLWD). This award-winning programme is built on extensive research and practical application, demonstrating the profound benefits of creative music sessions in fostering social connections, enhancing mood, and reducing agitation among participants.

#### **Programme Objectives**

The programme has several key objectives: Enhance the well-being of people living with dementia, train Music Champions, increase community and care home integration, foster social connections between people living with dementia, their relatives and care staff as well as reduce agitation and enhance the mood of programme beneficiaries.

In short, this means that the primary goal of the Music in Mind programme is to enhance the well-being of PLWD by engaging them in music therapy-based sessions. These sessions are designed to improve mood, increase social interaction, and provide participants with a sense of purpose and joy.

The programme also aims to empower caregivers, family members, and volunteers by training them as Music Champions. These individuals receive comprehensive training to lead music therapy-based sessions, ensuring the sustainability and long-term impact of the programme.

Music in Mind is delivered in both community settings and residential care homes. This dual approach allows for a broader reach, ensuring that PLWD in various living situations can benefit from the programme. By participating in group music sessions, PLWD can develop and maintain social connections, reducing feelings of isolation and loneliness. Regular participation in music therapy-based sessions has been shown to reduce agitation and improve the overall mood of PLWD, contributing to better mental health and quality of life.

#### Programme Significance

The Music in Mind programme stands out for its innovative approach to dementia care. By integrating music therapy-based sessions into the care routines of PLWD, the programme addresses both emotional and social needs, which are often overlooked in traditional care settings. Key aspects of its significance are therapeutic benefits; empowerment of staff through training; creating an evidence-based impact; explore programme scalability and replication; as well as provide information and support for future commissioning.

Music therapy-based sessions has been proven to have numerous therapeutic benefits, including reducing anxiety, improving cognitive function, and enhancing emotional well-being. The programme leverages these benefits to provide a holistic care approach.

Training caregivers and volunteers as Music Champions not only ensures the programme's sustainability but also empowers these individuals with new skills and confidence. This aspect of the programme promotes a community-based model of care where everyone can contribute to the well-being of PLWD.

The programme's effectiveness is rigorously evaluated, with a focus on both qualitative and quantitative data. This evidence-based approach ensures that the programme's benefits are documented and understood, supporting future funding and expansion efforts.

With its successful implementation in multiple boroughs, the Music in Mind programme serves as a model that can be replicated and scaled to other regions. This potential for scalability makes it a significant contribution to the field of dementia care.

The development of a toolkit for health and care commissioners, based on the programme's outcomes, supports the case for music therapy-based sessions-based interventions. This toolkit provides practical guidelines and evidence of cost-effectiveness, aiding in the broader adoption of similar programmes. The Music in Mind programme thus not only enhances the lives of PLWD through the power of music but also builds a community of trained caregivers and volunteers, creating a sustainable and impactful model of dementia care.

#### **Key Findings**

The Music in Mind programme consistently demonstrated its ability to improve the mood and reduce agitation among people living with dementia (PLWD). Participants became calmer and happier during and after sessions, exhibiting noticeable changes in their emotional state. Regular music sessions contributed to these positive emotional outcomes, validating the programme's primary objective of enhancing the emotional well-being of PLWD.

Participants showed increased social interaction and engagement with peers and carers, breaking out of their isolation. The programme fostered new social connections and improved existing ones, reducing feelings of loneliness and improving overall quality of life.

Quantitative data indicated a clear upward trend in participation, with participants becoming more actively involved in sessions through singing, playing instruments, and dancing. This active involvement enhanced their enjoyment, self-esteem, and confidence, underscoring the importance of participant-centred and personalised approaches in music therapy-based sessions.

The training provided to Music Champions significantly boosted their confidence and skills to deliver music therapy-based sessions independently. The comprehensive and

practical nature of the training was particularly appreciated. However, suggestions for extending the duration of training sessions and providing more follow-up support indicate areas for improvement.

Unexpected outcomes included initial resistance from some care staff, who were sceptical about the programme's benefits and hesitant to change established routines. Over time, many of these staff members became actively involved and enthusiastic about the sessions. The programme's positive impact on the overall care environment was also noted, with sessions bringing new energy and enjoyment to care homes.

Challenges related to inconsistent data collection and grouping across different settings highlighted the need for standardised data collection procedures. High initial scores on the emotion capture forms left little room for observable improvement, potentially underestimating the programme's impact.

#### **Key Recommendations**

Design and Implement a More Comprehensive Emotion Capture Form

- Develop a detailed form that includes a broader range of emotional and behavioural indicators.
- Transition from paper-based forms to a digital platform for data collection to streamline processes and improve accuracy.

#### Standardise Data Collection Procedures

- Provide comprehensive training for staff on new forms and digital platforms.
- Conduct regular audits to ensure consistency and address biases.

#### Mitigate Data Collection Bias

• Incorporate blinded assessments and use multiple observers to reduce observer bias and provide a balanced view.

#### Increase Frequency and Duration of Sessions

• Extend the duration and increase the frequency of sessions based on participant feedback to enhance engagement and benefits.

#### Enhanced Customisation and Personalisation

- Tailor music selections and activities to individual preferences and cultural backgrounds.
- Develop adaptive programming based on ongoing feedback.

#### Improved Training and Support for Music Champions

- Introduce advanced training modules and provide ongoing support and mentorship.
- Implement regular check-ins, refresher courses, and peer support groups.

#### Integration with Broader Care Practices

• Integrate music therapy-based sessions with other therapeutic activities and routines in care homes.

• Actively involve family members and caregivers in sessions and provide them with training and resources.

#### Rigorous Evaluation and Reporting

- Conduct more rigorous evaluations, including pre-post controlled studies, to establish causal effects.
- Ensure detailed and transparent reporting of outcomes and share findings with stakeholders.

#### Structured Expansion Plan

- Implement a phased rollout strategy with pilot programmes in select boroughs.
- Prioritise expansion to areas with the greatest need and readiness.

#### Ongoing External Independent Evaluations

- Engage an external evaluation partner to conduct rigorous assessments.
- Use a mixed-methods approach and establish a regular reporting schedule to share findings with stakeholders.

# **Final Report**

# Background

#### **Current Evidence**

Music therapy-based sessions has been extensively studied as a non-pharmacological intervention for dementia, with numerous documented benefits across various domains. Research consistently shows that music can improve mood, reduce agitation, and enhance social interaction among PLWD (Baird & Samson, 2015). The Music in Mind programme's evaluation mirrors these findings, as participants demonstrated increased engagement, improved mood, and enhanced social interactions.

In terms of mood and emotional well-being, music therapy-based sessions is widely recognised for its ability to reduce anxiety and agitation in PLWD. Studies by Svansdottir and Snaedal (2006) and Raglio et al. (2010) have shown that music interventions can lead to significant reductions in these symptoms. Similarly, the Music in Mind programme reported decreased agitation and improved mood among participants, supporting the therapeutic benefits of music (Music in Mind Briefing Doc, 2022). The programme's use of personalised music and participant-centred activities likely contributed to these positive emotional outcomes, aligning with findings by Burns and Morris (2018).

Music therapy-based sessions also facilitate social interaction among PLWD. Research by Lee and Adams (2011) and Hara (2011) highlights how music can serve as a medium for social engagement. The Music in Mind programme reported similar findings, with participants showing increased social interaction and forming new connections during sessions (Music in Mind Evaluation, 2019). Group music-making activities, such as those in the Music in Mind programme, promote social cohesion and a sense of community, consistent with Vink et al. (2011), who noted that group settings in music therapy-based sessions can improve social skills and awareness of others.

While the cognitive benefits of music therapy-based sessions are still being explored, some studies suggest that music can stimulate cognitive functions and memory. For example, Särkämö et al. (2014) found that singing and music listening improved cognitive functioning in dementia patients. The Music in Mind programme also observed improvements in communication and cognitive engagement, albeit primarily through qualitative feedback (Music in Mind Briefing Doc, 2022). Moreover, music therapy-based sessions enhances communication for PLWD, especially those with severe communication impairments. Studies by Kneafsey (1997) and Larkin (2001) support the use of music as a tool for non-verbal communication. The Music in Mind programme's emphasis on individualised, participant-led sessions likely facilitated these communication benefits.

There have also been largely qualitative studies which highlight the transformative impact of the *Music in Mind* and similar programmes on individuals living with dementia, particularly younger onset dementia, and their carers (Dowlen *et al.*, 2022,

2024; Campbell *et al.*, 2024). They emphasise the importance of improvisational music-making as a medium for fostering creativity, self-expression, and connection. Central to these studies is the concept of "care aesthetics," which frames care as a sensory, relational, and embodied practice that goes beyond technical proficiency to enhance the quality of care interactions (Campbell *et al.*, 2024). The findings demonstrate that participation in these programmes enables individuals to share personal narratives, experience agency in their contributions, and develop meaningful connections with others.

This extends into benefits beyond the sessions, enhancing relationships and quality of life. Across the studies, music-making is shown not only to provide therapeutic benefits but also to celebrate the capabilities and humanity of people living with dementia, positioning them as active participants in their care and in the community. Therefore *Music in Mind* and similar programmes stand out as a model for creating inclusive and emotionally enriching spaces, demonstrating the potential of arts-based interventions in dementia care.

The Music in Mind programme contributes to the existing body of research by providing further evidence of the benefits of music therapy-based sessions for PLWD, particularly in the following areas: personalised and participant-centred approaches, integration with care practices, and sustainability through training. The programme's success in improving mood, social interaction, and engagement highlights the importance of personalised and participant-centred approaches in music therapy-based sessions, aligning with the best practices identified by Kneafsey (1997). Additionally, the programme's integration of music therapy-based sessions with regular care practices in care homes underscores the potential for music therapy-based sessions to be embedded within everyday care routines, supporting findings by Killick and Craig (2012).

By training care staff to deliver music therapy-based sessions, the Music in Mind programme addresses the sustainability of therapeutic interventions. This approach is supported by research from Wall and Duffy (2010), which emphasises the benefits of caregiver involvement in music therapy-based sessions. The programme's model of empowering staff through training can serve as a blueprint for other interventions aiming to achieve long-term sustainability.

While the findings from the Music in Mind programme are promising, several limitations are noted in both the programme evaluation and the broader literature. Many studies, including those cited here, face methodological challenges such as small sample sizes, lack of control groups, and variability in intervention delivery (Baird & Samson, 2015). The Music in Mind programme also encountered these issues, particularly in data collection consistency and the absence of a control group (Music in Mind Evaluation, 2019).

There is a need for more rigorous randomised controlled trials (RCTs) to conclusively establish the benefits of music therapy-based sessions for dementia. As highlighted by Vink et al. (2011) and Burns & Morris (2018), the current evidence base would benefit from more high-quality trials to validate findings and explore the mechanisms underlying music therapy-based sessions' effects. Future research should explore the long-term benefits of music therapy-based sessions interventions and their impact on

different types of dementia. The Music in Mind programme's positive outcomes over the short term are encouraging, but longitudinal studies are needed to assess sustained benefits and potential variations across dementia types (Steen et al., 2018).

In conclusion, the Music in Mind programme's evaluation aligns well with existing research on music therapy-based sessions for dementia, demonstrating significant benefits in mood improvement, social interaction, and engagement among PLWD. The programme's personalised, participant-centred approach and integration with care practices contribute valuable insights to the field. However, ongoing research and more rigorous trials are necessary to further validate these findings and explore the long-term impact of music therapy-based sessions on dementia.

## **Programme Description**

The Music in Mind programme is a pioneering initiative developed by Manchester Camerata and its subsidiary, Music in Mind Remote Ltd. This program leverages the transformative power of music therapy-based sessions to enhance the quality of life for people living with dementia (PLWD). The program operates on a foundation of extensive research and practical application, highlighting the significant benefits of music in fostering social connections, enhancing mood, and reducing agitation among participants. The primary goals of the Music in Mind programme are multifaceted, focusing on both immediate and long-term impacts on PLWD and their caregivers:

- 1. Enhancing Well-being: The programme aims to improve the emotional and psychological well-being of PLWD through regular music therapy-based sessions. These sessions are designed to reduce agitation, enhance mood, and provide a sense of purpose and joy.
- 2. Training Music Champions: A crucial aspect of the programme is the training of caregivers, family members, and volunteers as Music Champions. These individuals are equipped with the skills and confidence to lead music therapy-based sessions independently, ensuring the programme's sustainability and extending its reach.
- 3. Community and Care Home Integration: Music in Mind sessions are delivered in both community settings and residential care homes. This dual delivery model allows the programme to reach a diverse group of PLWD, adapting to different living environments and ensuring broad accessibility.
- 4. Fostering Social Connections: By participating in group music sessions, PLWD have the opportunity to build and maintain social connections, reducing feelings of isolation and loneliness.
- 5. Supporting Future Commissioning: The programme includes the development of a toolkit for health and care commissioners. This toolkit provides evidence of the programme's effectiveness and cost-efficiency, supporting future funding and the adoption of similar initiatives.

The Music in Mind programme operates within the context of increasing recognition of the therapeutic benefits of music for dementia care. Dementia affects millions of people worldwide, posing significant challenges for individuals, families, and healthcare systems. Traditional care approaches often focus on medical and physical needs, sometimes overlooking the emotional and social aspects of care that are crucial for overall well-being.

Music therapy-based sessions has emerged as a valuable tool in dementia care, offering a non-pharmacological approach to improving quality of life. Research has shown that music can stimulate cognitive functions, evoke memories, and provide emotional relief. The Music in Mind programme harnesses these benefits, providing structured yet flexible sessions led by professional musicians and music therapists.

In Greater Manchester, where the programme is primarily based, there is a strong emphasis on community-based health initiatives. The Music in Mind programme aligns with regional health strategies that prioritise holistic and person-centred care. By integrating music therapy-based sessions into care homes and community settings, the programme not only addresses the needs of PLWD but also supports caregivers and enhances the overall care environment.

Within the broader context of the NHS and social care system, there is a growing emphasis on innovative approaches to managing long-term conditions such as dementia. The NHS Long Term Plan highlights the importance of personalised care and support for people with dementia, aiming to improve their quality of life and reduce the burden on health services. Care homes play a critical role in this landscape, providing residential support to a significant number of PLWD. However, these settings often face challenges such as staff shortages and high levels of patient agitation.

The Music in Mind programme addresses these challenges by providing an engaging and therapeutic activity that can reduce agitation and improve mood, potentially decreasing the reliance on medication and other healthcare resources. By training staff and volunteers as Music Champions, the programme enhances the capacity of care homes to offer high-quality, person-centred care. This aligns with NHS goals of reducing hospital admissions and enhancing the overall well-being of residents.

Overall, the Music in Mind programme is likely to represent a significant advancement in dementia care, offering a scalable and evidence-based model that can be replicated in other regions. Its comprehensive approach, combining immediate therapeutic benefits with long-term sustainability through training and toolkit development, sets a benchmark for innovative dementia care initiatives.

# **Evaluation Objectives and Parameters**

Our present evaluation of the Music in Mind programme is a critical process aimed at assessing its effectiveness, impact, and value for people living with dementia (PLWD), their caregivers, and the broader community. The objectives and focus of the evaluation have evolved over time, reflecting the growing understanding of the programme's potential and the need to provide comprehensive and actionable insights for future development.

The commissioners of this evaluation have set the following tasks for the evaluation team:

#### 1. To assess the impact of the programme on participants

This task related to produce evidence with regard to the emotional and psychological well-being of programme beneficiaries. The evaluation was asked to analyse existing programme data to assess changes in mood, social interaction, and agitation among PLWD who participate in the Music in Mind sessions.

The evaluation was also requested to see if there are any changes in social connections in order to measure the extent to which the programme fosters social connections and reduces feelings of isolation among participants.

#### 2. Evaluating Training Effectiveness

A further objective of the evaluation was to assess the quality and impact of the training provided to Music Champions (caregivers, family members, and volunteers) to determine their confidence and preparedness to lead music sessions independently. This included their skill development through the acquisition of new skills and the long-term sustainability of these skills among Music Champions.

#### 3. Understanding Programme Implementation

A third objective was to analyse the delivery of music therapy-based sessions in both care homes and community settings, identifying any variations in implementation and outcomes across different environments. This was connected to the task to gather insights from a wide range of stakeholders, including programme leads, musicians, therapists, and NHS commissioners, to understand their perspectives on the programme's effectiveness.

The evaluation consists of a last phase in which a toolkit for commissioners is to be developed. This phase has not been undertaken yet and will be reported in a final report to the commissioners.

#### Relevance of Evaluation

The evaluation of the Music in Mind programme holds significant importance for reasons of evidence-based Programme validation; for informing future programme development; for supporting broader adoption of the Camerata model in the care sector; for enhancing care quality; as well as for promoting holistic care.

In detail this means that by rigorously assessing the programme's outcomes, the evaluation provides robust evidence of its benefits for PLWD and their caregivers. This

validation is crucial for securing ongoing funding and support from stakeholders, including the NHS and local authorities.

The insights gained from the evaluation will guide the refinement and expansion of the Music in Mind programme. Understanding what works well and identifying areas for improvement will help tailor the programme to better meet the needs of participants and ensure its long-term success.

The development of a comprehensive toolkit for health and care commissioners will facilitate the wider adoption of music therapy-based sessions-based interventions. By providing practical guidance and evidence of cost-effectiveness, the toolkit will help other regions and organisations implement similar programmes.

The evaluation highlights the impact of music therapy-based sessions on reducing agitation, improving mood, and fostering social connections among PLWD. These outcomes are aligned with broader healthcare goals of enhancing the quality of life for individuals with dementia and reducing the burden on healthcare services.

By integrating music therapy-based sessions into the care routines of PLWD, the Music in Mind programme exemplifies a holistic approach to dementia care. The evaluation underscores the importance of addressing emotional and social needs alongside physical health, contributing to a more comprehensive and person-centred care model.

In conclusion, this evaluation of the Music in Mind programme is a vital process that not only measures the success of the current initiative but also lays the groundwork for future innovations in dementia care. Through rigorous assessment and the development of supportive tools, the evaluation ensures that the benefits of the programme can be sustained, replicated, and scaled to reach more individuals and communities in need.

#### **Evaluation Scope**

The evaluation of the Music in Mind programme encompasses four boroughs in Greater Manchester: Wigan, Manchester, Oldham, and Rochdale. It involves a diverse range of stakeholder groups, including people living with dementia (PLWD), caregivers, family members, Music Champions (volunteers and paid carers), musicians, music therapists, programme leads, and NHS commissioners. The programme runs sessions in both care homes and community settings. The evaluation used programme and service data which covers the entire duration of the programme, which spans 10 to 20 weeks per site, with sessions held once a week. Additional data collection and analysis were conducted from May 2024 until July 2024.

#### **Evaluation Parameters**

The evaluation of the Music in Mind programme is designed to achieve several key aims and objectives, focusing on the impact on participants and the effectiveness of the training provided.

The primary aim is to assess the emotional and psychological impact of the Music in Mind sessions on people living with dementia (PLWD). This includes evaluating changes in mood, social interaction, and levels of agitation. The evaluation seeks to determine how the programme fosters social connections and reduces feelings of isolation among participants, ultimately enhancing their overall well-being.

Another crucial objective is to evaluate the effectiveness of the training provided to Music Champions—caregivers, family members, and volunteers. This involves assessing their confidence and preparedness to lead music sessions independently and examining the acquisition and retention of new skills. The evaluation aims to ensure that Music Champions feel equipped and supported to sustain the programme's benefits in the long term.

#### **Key Evaluation Questions**

The evaluation of the Music in Mind programme has formulated key evaluation questions through which it aimed to assess its impact and effectiveness across various dimensions. The key evaluation questions are as follows:

#### 1. Participant Impact

What changes in mood, social interaction, and agitation are observed in people living with dementia (PLWD) during and after participation in the Music in Mind sessions? How do the Music in Mind sessions influence the overall well-being and quality of life of PLWD?

To what extent do the sessions foster social connections and reduce feelings of isolation among PLWD?

What specific improvements or memorable experiences have been noted by stakeholders in participants' behaviour and engagement?

#### 2. Training Effectiveness

How effective is the training programme for Music Champions in improving their confidence and skills in delivering Music in Mind sessions independently?

What are the perceived strengths and weaknesses of the training process as reported by Music Champions, musicians, and music therapists?

How well-prepared do Music Champions feel to continue the sessions without direct oversight from professional musicians or therapists?

What additional support or resources do Music Champions require to enhance their ability to deliver sessions effectively?

#### 3. Programme Implementation

How was the Music in Mind programme introduced and implemented in different settings, and what challenges were encountered during this process?

How do programme organisers and managers support the implementation of the programme, and what improvements could be made?

What are the perceptions of community group and care home managers regarding the impact of the programme on their settings and on staff engagement?

#### 4. Stakeholder Experiences

What feedback have participants, their families, and carers provided about the Music in Mind sessions, and how is this feedback used to improve the programme?

What are the experiences and perceptions of NHS commissioners regarding the programme's impact, value for money, and alignment with existing dementia care services?

How do professional care staff, community workers, and volunteers perceive the impact of the programme on their work and on the PLWD they support?

#### 5. Sustainability and Future Directions

What are the views of stakeholders on the long-term sustainability and potential for scaling up the Music in Mind programme?

What suggestions do stakeholders have for future iterations and improvements of the programme?

What are the potential challenges and considerations for expanding the programme successfully to other regions or settings?

These evaluation questions guide the reporting of the findings in the sections below.

#### **Evaluation Methods**

The evaluation of the Music in Mind programme employs a mixed methods approach, combining both quantitative and qualitative data collection and analysis techniques. This approach integrates the strengths of both types of data, providing a comprehensive understanding of the programme's impact and effectiveness.

A mixed methods approach involves the systematic integration of quantitative and qualitative research methods within a single study. Quantitative methods typically involve the collection and analysis of numerical data, which can be used to identify patterns, measure variables, and test hypotheses. In contrast, qualitative methods involve collecting non-numerical data, such as interviews, observations, and openended survey responses, to gain deeper insights into participants' experiences, perceptions, and motivations.

In the present context this meant that a structured survey was administered to Music Champions. The survey instrument included questions about training satisfaction, confidence levels, observed improvements in participants, and more.

We also analysed existing programme and service data from participant observation logs, which noted engagement and interaction levels during sessions. Statistical analysis was performed using tools like SPSS to summarise the data (e.g., mean scores, frequency distributions) and identify significant patterns or correlations.

In addition, we conducted a significant number of in-depth interviews with musicians, music therapists, programme leads, NHS commissioners, and community group/care home managers which provided rich, contextual insights into the programme's implementation and impact. The qualitative data were analysed using thematic analysis, which involved coding the data and identifying key themes and patterns that emerged from participants' responses.

By combining quantitative and qualitative data, the evaluation captures a holistic view of the Music in Mind programme. Quantitative data provides measurable evidence of the programme's impact, while qualitative data offers detailed insights into the

experiences and perceptions of participants and stakeholders. The mixed methods approach also usually enhances the validity of the evaluation findings. Quantitative data can be validated and enriched through qualitative insights, ensuring that the results are robust and well-rounded.

Our approach was also flexible and adaptable, allowing the evaluation to respond to emerging findings and adjust data collection strategies as needed. This adaptability was crucial for capturing the dynamic and complex nature of the Music in Mind programme where some data collection techniques garners fewer than expected responses.

In summary, the mixed methods approach used in the evaluation of the Music in Mind programme provides a comprehensive, valid, and nuanced understanding of the programme's impact and effectiveness. By integrating quantitative and qualitative data, the evaluation captures the full spectrum of stakeholder experiences and programme outcomes, ensuring robust and actionable insights for future development.

#### **Data Collection**

The evaluation of the Music in Mind programme utilised several pre-collected data sources to assess its impact and effectiveness. These data sources provided a foundational understanding of the programme's implementation and outcomes.

#### Participant Observation Logs

The primary source of existing data came from participant observation logs, which were systematically completed by Music Champions during each session. These logs captured detailed information on participants' engagement, mood, and social interactions. Observers recorded various behaviours and emotional responses using standardised forms. For instance, they noted whether participants were grinning, frowning, smiling, uninterested, or showing other emotional reactions. Additionally, the logs included observations on specific activities, such as playing instruments, singing, dancing, listening, and interacting with others. This rich observational data provided quantitative and qualitative insights into the participants' experiences and the immediate impact of the sessions.

#### Survey and Semi-Structured Interviews

To supplement the existing data and gain a comprehensive understanding of the Music in Mind programme, new data were collected through an online survey and semi-structured interviews. These methods provided rich, qualitative insights from a diverse range of stakeholders.

A detailed survey was sent out to all Music Champions, including both volunteers and paid carers. The survey collected data on their training satisfaction, confidence in delivering sessions, observed improvements in participants, and the challenges faced during session delivery. This quantitative data helped assess the overall effectiveness of the training and support provided to Music Champions.

Although there were no formal training feedback forms as originally planned, the evaluation included data from discussion group interviews conducted during a training day. These group discussions involved Music Champions, musicians, and music therapists, providing a platform for participants to share their experiences, challenges, and perceptions of the training process. The insights from these discussions were instrumental in understanding the effectiveness of the training, identifying areas for improvement, and capturing qualitative data on the participants' preparedness and confidence in delivering the Music in Mind sessions independently.

A total of 19 musicians and music therapists involved in the programme were interviewed. These interviews explored their experiences in delivering sessions, the training process for Music Champions, and their observations on the impact of the programme on participants. Specific interviewees included professional musicians and therapists from various community settings. Interviews were also conducted with several managers from care homes and community groups. These interviews focused on the implementation of the programme, challenges faced, support received, and the perceived impact on their organisations and participants. Finally, four commissioners were also interviewed to understand their perspectives on the programme's implementation, alignment with existing dementia care services, and the overall impact and value for money. These interviews provided insights into the strategic importance of the programme and its scalability.

The interviews were conducted via various methods, including face-to-face meetings, video calls, and telephone calls, ensuring flexibility and convenience for the participants. Each interview was recorded with consent to ensure accuracy in data transcription and analysis.

#### Data Analysis

The evaluation of the Music in Mind programme employed a robust data analysis approach, utilising both statistical and thematic methods to comprehensively understand the programme's impact and effectiveness.

#### Statistical Analysis

Descriptive statistics were used to summarise the data collected from the participant observation forms. This involved calculating measures such as means, ranges, and standard deviations to provide an overview of the key variables. Key variables included interaction, engagement, and participation scores of the participants. These scores were assessed to identify general patterns and trends in the data. The analysis included calculating the mean scores of interaction, engagement, and participation across multiple sessions for individual participants. This provided a comprehensive view of the average levels of these variables over time.

Time series analysis was also conducted on a subgroup of participants who had four or more observation forms completed. This subgroup analysis helped in understanding the changes in interaction, engagement, and participation scores over time. The analysis faced challenges such as inherent completion bias and the difficulty in detecting significant changes over time due to relatively high initial engagement

scores. We used graphs and charts in this report to visually represent the mean scores of interaction, engagement, and participation over different time points.

#### Thematic Analysis

Interviews with musicians, music therapists, care home and community group managers, and NHS commissioners provided rich qualitative data. These interviews were transcribed and analysed to extract meaningful themes and patterns. Group interviews conducted during the training day with Music Champions and other stakeholders contributed additional qualitative insights into the training process and programme implementation.

The Emotion Capture Forms also contained 'other notes' from staff and volunteers who completed the forms at the sessions. These notes provided additional rich detail on how the sessions were perceived by programme beneficiaries as well as those who facilitated the sessions.

Transcribed data from interviews and the open text notes from the Emotion Capture Forms were initially coded to identify significant statements and insights. Codes were then grouped into broader categories reflecting key aspects of the programme. Through an iterative process, themes were developed that captured the core experiences and perceptions of the stakeholders. These themes included observations on participant impact, training effectiveness, and implementation challenges.

#### Integration of Qualitative and Quantitative Data

The advantage of mixed methods evaluation methods is that the qualitative themes can be integrated with the quantitative findings to provide a comprehensive understanding of the programme's impact. This mixed-methods approach ensured that the numerical data were contextualised with detailed narrative insights in our report below.

# **Findings**

#### Results from Emotion Capture Form Analysis

The Emotion Capture forms were designed to systematically document and measure the emotional and behavioural responses of people living with dementia (PLWD) during Music in Mind sessions. These forms capture a range of observations, focusing on participants' interaction, engagement, and participation levels. The first section records basic information about the participant, the observer, and the session's context. It includes the participant's full name, the observer's name, and the specific care home or community group.

Observers mark the timeline of the session, noting significant events such as the "Hello Song" and "Goodbye Song," and the start and end times. Observations of participants are marked along this timeline to provide context for their behaviour at specific points during the session. Observers use a set of pre-defined emoticons and stick figures to record the participant's current emotion and action at various points throughout the session. Different colors are used for each observation to differentiate multiple entries on the same form. At the end of the session, observers rate each participant on three key metrics: Interaction, i.e. frequency and quality of communication with others; engagement, i.e. the impact of the music on the participant; and participation, ie. the level of active involvement in the session (e.g., playing instruments, singing, dancing). Ratings are given on a scale from 0 to 5, with observers shading in corresponding circles.

The last section allows observers to provide additional qualitative data on the interactions between participants and any notable occurrences or behaviours observed during the session. Observers can also add any extra observations or comments that they feel are relevant but not covered in the other sections.

#### **Analysis Process**

The completed forms were collected and analysed to identify patterns and trends in participant behaviour over time. The data were entered into a database for statistical analysis, focusing on three primary scores: interaction, engagement, and participation. Two types of analysis were undertaken:

- 1. Descriptive Statistics: This established the average scores for interaction, engagement, and participation which were calculated across all sessions to provide an overview of participant responses.
- 2. Time Series Analysis: For participants with multiple forms (specifically those with four or more observations), a time series analysis was conducted to examine changes in scores over time. This analysis aimed to identify trends and potential improvements in participant behaviour as they attended more sessions.
- 3. Subgroup Analysis: A focused analysis on a subgroup of participants who had several completed forms was also conducted to gain deeper insights into their individual progress and engagement levels.

#### Results

The dataset comprised 747 forms from 265 participants, averaging 2.82 forms per participant. For trend analysis, we looked at mean scores for the three indicators for the entire cohort. The table below lists the mean scores for the entire cohort of programme beneficiaries for which we have emotion capture forms. It is important to note that the number of available forms decreases rapidly over the three time points included in this analysis.

Table 1 Mean Scores of Programme Indicators for entire cohort

Measure	Mean Score 1	Mean Score 2	Mean Score 3
Interactions	3.78	3.78	4.41
Engagement	3.83	3.8	4.51
Participation	3.83	3.87	4.49

The charts below indicate the mean interaction score of all forms over time.

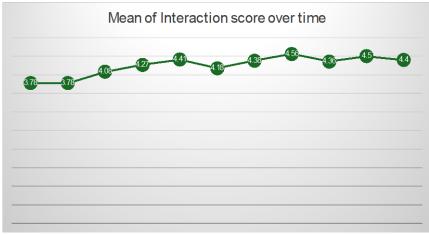


Figure 1 Average Interaction Score over time for entire cohort

We repeated this analysis for the engagement score for all participants over time.

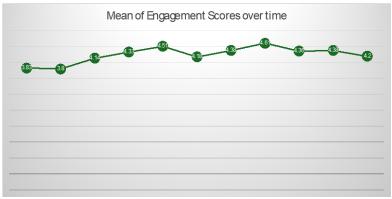


Figure 2 Average Engagement Score over time for entire cohort

We then also conducted a trend analysis for the entire cohort for the mean participation score over time.

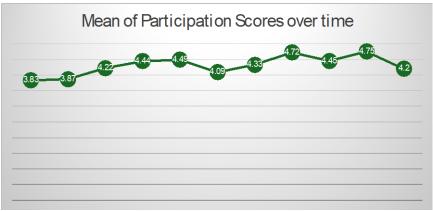


Figure 3 Average Participation Scores over time for entire cohort

It is important to note that scores in the time series are consisting of fewer data from emotion capture forms as time progresses with the fourth time point containing data from only 23 participants.

To ensure robustness of the analysis we then created a subgroup of participants with at least three emotion capture forms at regular intervals, reducing the sample to 48 participants. The chart below indicates their mean score for all three programme impact indicators, engagement, participation and interaction.

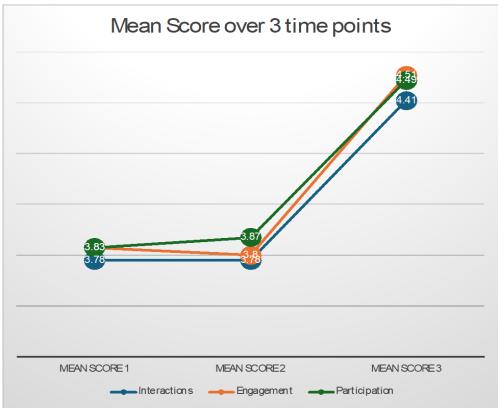


Figure 4 Mean Score for subgroup (48 participants) with at least three emotion capture forms

The analysis shows that interaction scores started at an average of 3.78 and increased to 4.41 over the observed sessions. A steady improvement in interaction scores indicates that participants became more communicative and engaged with others as sessions progressed. Also, engagement scores started at a mean of 3.83, peaking at 4.51.

Participants showed high levels of engagement, suggesting the music had a strong initial impact which was sustained over time. Lastly, mean participation scores also increased over time from 3.83 to 4.49. There was a clear upward trend in participation, indicating that participants became more actively involved in the sessions.

We also conducted a second subgroup analysis for 43 participants who had at least 6 emotion capture forms. It should be noted however that these forms do not originate with individual sessions in a regular frequency. The table below indicates the trend of participants' interaction over time.

Measure	Number of Forms	Range	Minimum	Maximum	Sum	Mean	Std. Deviation
Session 1	42	4	1	5	176	4.19	1.110
Session 2	43	3	2	5	192	4.47	.882
Session 3	44	4	1	5	190	4.32	.934
Session 4	46	3	2	5	202	4.39	.829
Session 5	41	4	1	5	181	4.41	.894
Session 6	33	4	1	5	138	4.18	1.103

Whilst there is a clear trend for this subgroup with interaction starting at a relatively high mean score, rising and then slightly decreasing over time, there may be various reasons for this. A slight decrease of mean scores over time may be explained by increased expectations of observers in terms of interactions of beneficiaries. The moderate increase in standard deviation also indicates a larger distribution of scores in the three domains within the group.

#### Discussion

The analysis clearly demonstrates that participants showed significant improvements in interaction scores over time, suggesting increased social communication and involvement with peers and carers. This indicates that the music sessions helped reduce social isolation and fostered a sense of community among participants.

The high engagement scores also reflect that participants were positively affected by the music, demonstrating emotional responsiveness and enjoyment. The initial strong impact of the sessions was maintained, indicating consistent engagement levels.

The upward trend in participation scores highlights that participants became more active in the sessions, engaging in activities such as singing, playing instruments, and

dancing. This active involvement is crucial for enhancing their overall well-being and quality of life.

#### Limitations

The inherent completion bias, where participants with higher engagement were more likely to have forms completed, may skew the results towards more positive outcomes. This makes it challenging to detect significant changes over time, especially for participants who started with high scores. While the analysis included a significant number of forms, the majority of participants had only a few forms completed. This limitation reduces the robustness of trend analysis over time.

In addition, the absence of a comparator group means the analysis can only describe patterns and trends without establishing causality. The improvements observed cannot be conclusively attributed to the Music in Mind programme without a control group for comparison. Inconsistent data collection and grouping across different boroughs and care homes made it difficult to analyse patterns specific to certain locations. Standardised data collection procedures would enhance the reliability and comparability of the results.

An important limitation is that the high initial scores on the Likert scale (0-5) left little room for improvement, potentially underestimating the programme's impact. This ceiling effect needs to be considered when interpreting the findings.

#### Conclusion

The quantitative analysis of the Music in Mind programme indicates significant positive impacts on the emotional and social well-being of PLWD, evidenced by improvements in interaction, engagement, and participation scores. However, the analysis is limited by selection bias, lack of a control group, and variability in data collection. Despite these limitations, the findings support the value of music therapy-based sessions in enhancing the quality of life for people living with dementia, underscoring the need for further research with more rigorous methodologies to validate these results.

# Findings from Interview Data

This section presents the thematic analysis of the interviews conducted as part of the Music in Mind programme evaluation. The analysis focuses on the impact of the programme on participants, people living with dementia (PLWD). Key themes identified relate to changes in mood, social interaction, agitation, overall well-being, quality of life, social connections, and specific memorable improvements noted by stakeholders. We report the findings in line with the evaluation questions listed on page 9 and 10. We have used a table format for each section to ease access to this large amount of themes and codes.

#### Impact on Participants

<b>Evaluation Question</b>	Theme	Description	Verification Quote
Improvement in Mood and Reduction in Agitation	Happiness noticeable improvements in mood, with many		"[Name], who used to be very anxious and shy, now walks with her head held high and smiles more often."
	Decreased Agitation	Regular music sessions contributed to reducing agitation among participants.	"We don't have to use PRN medication as much because the music sessions calm the residents down."
Enhanced Social Interaction	Increased Engagement with Others	Participants showed increased engagement with peers and carers, breaking out of their isolation.	"One participant who used to sit quietly now joins the conga line and interacts more with others."
	Formation of Connections	Music sessions helped participants form new social connections and improve existing ones.	"She's now relating and forming connections with other residents, which she didn't do before."
Improved Overall Well-Being and Quality of Life	Increased Participation and Enjoyment	Participants actively participated in sessions and showed visible enjoyment.	"They want the sessions to last longer because they enjoy them so much."
	Enhanced Self-Esteem and Confidence	Participants gained confidence and self-esteem through their involvement in the programme.	"A resident who used to avoid eye contact now comes in with her coat off and engages fully in the activities."
Fostering Social Connections and Reducing Isolation	Community Building	The programme fostered a sense of community among participants, reducing feelings of loneliness.	"The sessions brought everyone together, making them feel part of a community."
	Supportive Environment	The inclusive nature of the sessions created a supportive environment for participants.	"Everyone feels like they belong, and the sessions break down barriers."

Specific	Personal Milestones	Stakeholders noted	"A participant who
Improvements and	and Breakthroughs	significant personal	didn't respond initially
Memorable		milestones and	now smiles, joins in,
Experiences		improvements in	and even leads the
		behaviour and	sessions."
		engagement.	
	Emotional and	Memorable	"One lady, initially
	Behavioral Changes	experiences included	uninterested, ended up
		participants showing	leading a session with
		unexpected emotional	a tambourine on her
		and behavioural	terms."
		changes.	

The thematic analysis reveals that the Music in Mind programme has a profound positive impact on participants. Improvements in mood and reductions in agitation are consistently noted, contributing to a calmer and happier disposition among PLWD. The programme also enhances social interaction, helping participants break out of their isolation and form meaningful connections.

Overall well-being and quality of life are significantly improved, with participants showing increased participation, enjoyment, and confidence. The sessions foster a strong sense of community, reducing feelings of loneliness and creating a supportive environment. Specific improvements and memorable experiences highlight the transformative power of music therapy-based sessions, with participants achieving personal milestones and displaying significant emotional and behavioural changes.

#### **Training Effectiveness**

This section presents the thematic analysis of interviews and group discussion transcripts focusing on the effectiveness of the training provided to Music Champions within the Music in Mind programme. The analysis covers their confidence and skills in delivering sessions, perceived strengths and weaknesses of the training, their preparedness for independent session delivery, and additional support or resources required.

<b>Evaluation Question</b>	Theme	Description	Verification Quote
Improvement in Confidence and Skills	Increased Confidence	Music Champions reported a significant increase in confidence in delivering sessions independently after undergoing the training.	"The training has really boosted my confidence. I feel much more prepared to lead the sessions on my own."
	Skill Development	Participants highlighted the development of new skills, particularly in music therapy-based sessions techniques and engaging with PLWD.	rewarding."
Perceived Strengths of the Training	Comprehensive and Practical	The training was praised for being	"The practical nature of the training was

		comprehensive and	fantastic. We got to	
	Supportive Environment		practice what we learned immediately."	
			"The trainers were very supportive, always ready to help and provide feedback."	
Perceived Areas for Improvement of the Training  Need for More Time		experiences.  Some Music Champions felt that the training sessions were too short and could benefit from additional time to cover more material.	"I wish the training sessions were a bit longer. There's so much to learn and practice."	
	Follow-Up Support	There was a desire for more follow-up support and ongoing training sessions to reinforce initial training and address new challenges.	"It would be great to have follow-up sessions or check-ins to ensure we're on the right track."	
Preparedness for Independent Session Delivery	Feeling Prepared	Most Music Champions felt well-prepared to deliver sessions independently, attributing their preparedness to the thorough training they received.	"I feel ready to take on the sessions by myself. The training covered everything I needed to know."	
	Real-World Application	The opportunity to practice in real-world settings during training helped Music Champions feel more confident and prepared.	"Practicing in actual sessions during the training was invaluable. It gave me a real sense of what to expect."	
Additional Support or Resources Required	Ongoing Training and Support	Music Champions expressed a need for ongoing training sessions and regular check-ins to address challenges and reinforce learning.	"Regular check-ins and additional training would help us stay on track and handle any issues that come up."	
	Access to Resources	There was a call for more resources, such as online materials, guides, and forums for Music Champions to share experiences and tips.	"Having access to online resources and a forum to discuss with other Music Champions would be really helpful."	

The thematic analysis indicates that the training provided to Music Champions in the Music in Mind programme is largely effective in enhancing their confidence and skills for delivering music therapy-based sessions independently. Participants appreciated the comprehensive and practical nature of the training, which provided hands-on experience and a supportive environment for learning.

However, there were suggestions for improvement, including extending the duration of training sessions and providing more follow-up support to address ongoing challenges. Most Music Champions felt well-prepared for independent session delivery, thanks to the real-world practice included in the training. They also expressed a need for additional support and resources, such as ongoing training sessions and access to online materials, to continue developing their skills and effectively manage the sessions.

Overall, the training programme is highly valued by Music Champions, and addressing the identified areas for improvement could further enhance its effectiveness and support the sustainable delivery of the Music in Mind sessions.

#### Programme Implementation

This section presents the thematic analysis of the interviews and group discussion transcripts focusing on the implementation of the Music in Mind programme. The analysis addresses how the programme was introduced and implemented in different settings, the challenges encountered, the support provided by programme organisers and managers, and the perceptions of community group and care home managers regarding its impact.

<b>Evaluation Question</b>	Theme	Description	Verification Quote
Introduction and Implementation in Different Settings	Contexts tailored to fit the unique needs and circumstances of each setting, whether in care homes or community		"We adapted the sessions to match the cultural backgrounds of the participants, incorporating familiar songs and instruments."
	Gradual Introduction	The programme was introduced gradually, allowing time for participants and staff to adjust and become comfortable with the new activities.	"We started with simpler activities and gradually introduced more complex sessions as everyone got used to the format."
Challenges Encountered During Implementation	Logistical Issues	Organizing sessions and ensuring consistent participation posed logistical challenges, particularly in care homes	"Coordinating schedules and ensuring all participants could attend regularly was quite a challenge."
	Staff Hesitancy and Engagement	Initial resistance from some staff members who were unsure of the	"Some staff were sceptical at first and

		programme's benefits or reluctant to change	hesitant to get involved in the sessions."
	Resource Constraints	established routines.  Limited resources, such as time, staff, and equipment, impacted the smooth implementation of the programme.	"We often faced resource constraints, from lack of instruments to insufficient staff to assist during sessions."
Support fro Programme Organisers an Managers		Organisers provided extensive training and ongoing support to staff and Music Champions, ensuring they were well-prepared to deliver the sessions.	"The training sessions were very thorough, and we received regular check-ins from the organisers."
	Resource Provision	Programme organisers supplied necessary materials and resources, such as musical instruments and activity guides.	"They provided us with all the instruments and materials needed for the sessions, which was a great help."
	Regular Communication and Feedback	Continuous communication and feedback loops were established to address any issues and improve the programme.	"We had regular meetings with the programme managers to discuss progress and any challenges we were facing."
Perceptions Community Grou and Care Hon Managers	•	Managers reported that the programme had a positive impact on their settings, enhancing the atmosphere and engagement levels.	"The programme has brought a new energy to the care home, with residents looking forward to the sessions each week."
	Increased Staff Engagement	The programme also positively affected staff engagement, with many staff members becoming more involved and enthusiastic.	"Staff members who were initially hesitant are now actively participating and enjoying the sessions."
	Improved Resident Relationships	Managers noted improvements in the relationships between residents and staff, fostering a more cohesive and supportive community.	"The sessions have helped build stronger bonds between staff and residents, creating a more harmonious environment."
Suggestions f Improvement	Enhanced Training and Support	Recommendations for more advanced training sessions and additional support to address specific challenges.	"It would be beneficial to have advanced training sessions focusing on specific issues we encounter during the sessions."
	Increased Resources	Calls for more resources, including	"Having more instruments and the

	additional musical instruments, more frequent sessions, and increased staffing support.	ability to run sessions more frequently would significantly enhance the programme."
Better Scheduling and Coordination	Suggestions to improve scheduling and coordination to ensure maximum participation and minimise disruptions.	

The thematic analysis reveals that the introduction and implementation of the Music in Mind programme varied across different settings, with adaptations made to fit local contexts. Challenges encountered included logistical issues, initial staff resistance, and resource constraints. However, extensive support from programme organisers and managers, including training, resource provision, and regular communication, played a crucial role in addressing these challenges.

Community group and care home managers perceived the programme to have a positive impact on their settings, enhancing the atmosphere, increasing staff engagement, and improving relationships between residents and staff. Suggestions for improvement focused on enhanced training and support, increased resources, and better scheduling and coordination.

#### Stakeholder Experiences

This section presents the thematic analysis of interviews and group discussion transcripts focusing on the experiences of various stakeholders involved in the Music in Mind programme. The analysis addresses feedback from participants, their families, and carers, experiences and perceptions of NHS commissioners, and the views of professional care staff, community workers, and volunteers.

<b>Evaluation Question</b>	Theme	Description	Verification Quote
Feedback from Participants, Families, and Carers	Positive Feedback	Increased Enjoyment and Engagement	"My mother looks forward to the music sessions every week. She is more engaged and happier during and after the sessions."
		Emotional and Social Benefits	"We've seen a noticeable improvement in her mood. She's more sociable and less withdrawn."
		Enhanced Quality of Life	"The music sessions have given her a sense of purpose and joy, which has been wonderful to see."
	Areas for Improvement	Session Duration and Frequency	"We wish the sessions could be longer or more frequent. She always wants them to last longer."
		Customisation of Sessions	"It would be great if the sessions could include more personalised music that she likes."
Experiences and Perceptions of NHS Commissioners	Positive Perceptions	Alignment with Dementia Care Services	"The Music in Mind programme fits perfectly with our holistic approach to

			dementia care. It offers a valuable therapeutic option."
		Value for Money	"Considering the positive outcomes, the programme offers excellent value for money."
		Positive Impact	"The improvements in mood and social interaction among participants are evident and very encouraging."
	Areas for Improvement	Scalability and Expansion	"The programme has great potential, but we need to find ways to scale it up and make it available to more people."
		Evaluation and Reporting	"We need more detailed evaluations and reports to fully understand the long-term benefits and impact."
Perceptions of Professional Care Staff, Community Workers, and	Positive Perceptions	Enhanced Work Environment	"The sessions have brought a positive energy to our work environment. It's more enjoyable and fulfilling for everyone."
Volunteers		Improved Relationships with Participants	"We've developed stronger bonds with the residents, which has improved the overall atmosphere."
		Skill Development	"The training and experience have boosted my confidence and equipped me with new skills to engage with the residents."
	Areas for Improvement	Resource Allocation	"We need more instruments and additional staff to help during the sessions to make them even more effective."
		Ongoing Training and Support	"Continuous training and support are essential to keep the programme running smoothly and effectively."

The thematic analysis reveals diverse feedback from various stakeholders involved in the Music in Mind programme. Participants, their families, and carers provided overwhelmingly positive feedback, noting increased enjoyment, emotional and social benefits, and enhanced quality of life. Areas for improvement included extending session duration and frequency and customizing sessions to individual preferences.

NHS commissioners viewed the programme positively, highlighting its alignment with existing dementia care services, value for money, and positive impact on participants. Suggestions for improvement focused on scalability, expansion, and more rigorous evaluation and reporting.

Professional care staff, community workers, and volunteers reported positive changes in the work environment, improved relationships with participants, and skill development. However, they also identified the need for better resource allocation and ongoing training and support.

Overall, the analysis underscores the importance of continuous feedback and improvement to enhance the Music in Mind programme's effectiveness and sustainability, ensuring it continues to meet the needs of all stakeholders involved.

## Sustainability and Future Directions

This section presents the thematic analysis of interviews and group discussion transcripts focusing on the long-term sustainability and future directions of the Music in Mind programme. The analysis addresses stakeholders' views on the potential for scaling up the programme, suggestions for future iterations and improvements, and potential challenges and considerations for expanding the programme to other regions or settings.

Evaluation	Themes	Descriptions	Quote
Question		of the Theme	
Long-Term Sustainability and Potential for		Strong Foundation	"The programme has a solid foundation and has shown significant positive outcomes, which bodes well for its sustainability."
Scaling Up	Positive Outlook on Sustainability Potential for Scaling Up	Community Support High Demand	"The community and care home support have been fantastic, providing a strong base for the programme's continuation."  "There is a clear demand for more sessions, and many other care homes and community
	Potential for Scaling Up	Replicability	groups are interested in participating."  "The programme's structure is very replicable, which means it can be implemented in other regions with the right support."
Suggestions for Future Iterations and Improvements	Enhanced Customisation	Enhanced Customisation	"Future sessions could be even more personalised to fit the specific preferences and cultural backgrounds of participants."
	Increased Training and Support	Increased Training and Support	"Ongoing training and support for Music Champions would help maintain the quality and effectiveness of the sessions."
	Technology Integration	Technology Integration	"Using technology, such as virtual sessions, could help reach participants who cannot attend in person."
Challenges and Considerations for Expansion	Resource Limitations	Resource Limitations	"Finding sufficient funding and resources is a major challenge to expanding the programme to more areas."
	Maintaining Quality	Maintaining Quality	"Maintaining the same high quality of sessions in different regions will require careful planning and oversight."
	Cultural Sensitivity	Cultural Sensitivity	"We need to be mindful of cultural differences and adapt the programme accordingly to ensure its effectiveness."
Positive Stakeholder Views on Expansion	Widespread Enthusiasm	Widespread Enthusiasm	"Everyone involved is excited about the possibility of expanding the programme and reaching more people."
	Evidence of Impact	Evidence of Impact	makes a compelling case for its expansion to other areas."
Specific Recommendations for Expansion	Partnerships and Collaborations	Partnerships and Collaborations	"Collaborating with local organisations and care homes will be crucial for successful expansion."
	Pilot Programmes	Pilot Programmes	"Starting with pilot programmes in new areas will help us identify and address any challenges before a broader rollout."

The thematic analysis reveals a generally positive outlook on the long-term sustainability and potential for scaling up the Music in Mind programme. Stakeholders believe the programme has a strong foundation and community support, indicating its feasibility for sustained operation and expansion. High demand and the replicable structure of the programme further support its scalability.

Suggestions for future iterations include enhanced customisation of sessions, increased training and support for Music Champions, and integrating technology to broaden the programme's reach. However, challenges such as resource limitations, maintaining quality, and cultural sensitivity need to be addressed to ensure successful expansion.

Stakeholders expressed widespread enthusiasm for expanding the programme, supported by the positive outcomes observed. Specific recommendations for expansion include building partnerships with local organisations, implementing pilot programmes, and ensuring ongoing training and support.

#### Discussion

The Music in Mind programme's evaluation aimed to assess its effectiveness across various dimensions, including participant impact, training effectiveness, programme implementation, stakeholder experiences, and sustainability. The detailed analysis of both quantitative and qualitative data provides comprehensive insights into how well the programme meets its initial evaluation goals.

#### **Participant Impact**

The primary objective of the Music in Mind programme was to enhance the emotional and social well-being of people living with dementia (PLWD). The quantitative data from emotion capture forms indicate significant improvements in interaction, engagement, and participation scores over time. Participants exhibited increased communication with peers and carers, higher levels of emotional responsiveness, and active involvement in sessions. These findings align with the programme's goal of reducing social isolation and fostering a sense of community among participants. Moreover, qualitative data from interviews highlight specific improvements in mood, reduced agitation, and memorable positive experiences, further corroborating the programme's impact on enhancing the quality of life for PLWD.

#### **Training Effectiveness**

The evaluation also aimed to assess the effectiveness of the training provided to Music Champions. The thematic analysis of interviews with Music Champions, musicians, and music therapists reveals that the training significantly boosted participants' confidence and skills. The practical, hands-on nature of the training was particularly appreciated, and most Music Champions felt well-prepared to lead sessions independently. However, suggestions for extending the duration of training sessions and providing more follow-up support indicate areas for potential improvement. These findings align with the objective of ensuring Music Champions are adequately equipped to sustain the programme's benefits independently.

#### Programme Implementation

Assessing the implementation of the Music in Mind programme in different settings was another key objective. The thematic analysis shows that the programme was successfully adapted to local contexts, whether in care homes or community groups. However, logistical challenges such as coordinating schedules and ensuring consistent participation were noted. Support from programme organisers, including training, resource provision, and regular communication, was crucial in overcoming these challenges. The positive feedback from community group and care home managers regarding the programme's impact on the atmosphere and staff engagement aligns with the objective of fostering a supportive and cohesive community environment.

#### Stakeholder Experiences

Understanding the experiences of various stakeholders, including participants, their families, carers, NHS commissioners, and professional care staff, was central to the evaluation. The feedback from participants, families, and carers was overwhelmingly positive, highlighting increased enjoyment, emotional and social benefits, and enhanced quality of life. NHS commissioners emphasised the programme's alignment with existing dementia care services and its cost-effectiveness. Professional care staff and volunteers reported improved work environments, better relationships with participants, and valuable skill development. These insights align with the programme's goal of providing a holistic and beneficial experience for all stakeholders involved.

#### Sustainability and Future Directions

Evaluating the long-term sustainability and potential for scaling up the programme was a crucial objective. Stakeholders expressed a positive outlook on the programme's sustainability, citing its strong foundation and community support. The high demand for the programme and its replicable structure support its potential for expansion. However, challenges such as resource limitations, maintaining quality, and ensuring cultural sensitivity need to be addressed. Suggestions for future iterations included more customised sessions, ongoing training for Music Champions, and integrating technology to reach a broader audience. These findings align with the objective of ensuring the programme's long-term viability and successful expansion.

### Limitations of the Analysis

While the findings provide valuable insights into the programme's effectiveness, certain limitations must be acknowledged. The inherent completion bias in emotion capture forms and the lack of a control group limit the ability to conclusively attribute observed improvements to the programme. Additionally, variability in data collection and high initial scores pose challenges in detecting significant changes over time. These limitations highlight the need for more rigorous methodologies in future evaluations to validate the results.

# **Key Evaluation Insights**

The evaluation of the Music in Mind programme has yielded several key insights and observations that underscore its impact on people living with dementia (PLWD). The analysis also highlights some unexpected outcomes and unintended consequences that provide a deeper understanding of the programme's broader effects.

The programme consistently demonstrated its ability to improve the mood and reduce agitation among PLWD. Participants became calmer and happier during and after sessions, with many exhibiting noticeable changes in their emotional state. Regular music sessions contributed to these positive emotional outcomes, supporting existing literature on the benefits of music therapy-based sessions for reducing anxiety and agitation in dementia patients (Svansdottir & Snaedal, 2006; Raglio et al., 2010). These findings validate the programme's primary objective of enhancing the emotional well-being of PLWD.

Participants showed increased social interaction and engagement with peers and carers, breaking out of their isolation. The programme fostered new social connections and improved existing ones, aligning with research that highlights music's role in enhancing social engagement (Lee & Adams, 2011; Hara, 2011). This sense of community and connectedness is crucial for reducing feelings of loneliness among participants and improving their overall quality of life.

The quantitative data indicated a clear upward trend in participation, with participants becoming more actively involved in sessions through singing, playing instruments, and dancing. This active involvement not only enhanced their enjoyment but also contributed to their self-esteem and confidence. The findings underscore the importance of participant-centred and personalised approaches in music therapy-based sessions, which can significantly boost engagement and participation levels.

The training provided to Music Champions was largely effective in enhancing their confidence and skills to deliver music therapy-based sessions independently. Participants appreciated the comprehensive and practical nature of the training, which provided hands-on experience and a supportive learning environment. However, suggestions for extending the duration of training sessions and providing more follow-up support indicate areas for improvement. These insights align with best practices identified in the literature and emphasise the need for ongoing support and resources for caregivers.

There were also some unexpected outcomes and unintended consequences which our analysis identified. An unexpected outcome was the initial resistance from some care staff, who were sceptical about the programme's benefits and hesitant to change established routines. Over time, however, many of these staff members became actively involved and enthusiastic about the sessions. This shift highlights the potential for music therapy-based sessions to not only benefit participants but also positively impact the attitudes and engagement of caregivers and staff. It underscores the importance of providing adequate training and support to overcome initial resistance.

The analysis revealed challenges related to inconsistent data collection and grouping across different settings. This variability made it difficult to analyse specific patterns

and trends and highlighted the need for standardised data collection procedures. While this was an unintended consequence, it provided valuable insight into improving the evaluation process for future iterations of the programme.

A notable limitation was the high initial scores on the emotion capture forms, which left little room for observable improvement. This ceiling effect potentially underestimated the programme's impact, as significant changes might have been masked by already high baseline scores. This outcome points to the need for more sensitive measurement tools that can capture subtle changes over time.

Another unintended consequence was the programme's positive impact on the overall care environment. The sessions brought a new energy and sense of enjoyment to the care homes, benefiting not only the participants but also the staff and other residents. This holistic improvement in the care environment supports the inclusion of arts and music in dementia care settings as a means to enhance overall well-being.

#### Recommendations

We have formulated recommendations for each evaluation question below.

#### Programme Improvement Suggestions

These recommendations are designed to enhance the robustness and rigour of measuring impact.

Design and Implement a More Comprehensive Emotion Capture Form

- Develop a more detailed emotion capture form that includes a broader range of emotional and behavioural indicators. This form should capture subtle changes in mood, social interaction, and engagement.
- Transition from paper-based forms to a digital platform for data collection. This
  would streamline data entry, reduce errors, and facilitate real-time analysis.
  Implementing a tablet-based system for data collection can enhance accuracy
  and ease of use for caregivers and staff.

#### Standardise Data Collection Procedures

- Provide comprehensive training for staff on how to use the new emotion capture forms and the digital platform. Develop clear guidelines and protocols to ensure consistency in data collection across different settings.
- Conduct regular audits of the data collection process to identify and address inconsistencies or biases. Provide feedback to staff to ensure adherence to standardised procedures.

#### Mitigate Data Collection Bias

- Where possible, incorporate blinded assessments where the person collecting the data is not the same individual who conducts the sessions. This can help reduce observer bias.
- Use multiple observers to rate each session independently. Comparing and averaging scores from different observers can help mitigate individual biases and provide a more balanced view of participant responses.

#### Increase Frequency and Duration of Sessions

- Based on participant feedback, consider extending the duration of the sessions to allow for deeper engagement and more sustained benefits.
- Increase the frequency of the sessions, where feasible, to enhance the continuity of the programme and reinforce its positive effects on participants.

#### Enhanced Customisation and Personalisation

- Ensure that music selections and activities are tailored to the individual preferences and cultural backgrounds of participants. Use initial assessments to gather information on participants' musical tastes and preferences.
- Develop adaptive programming that can be modified based on ongoing feedback from participants and caregivers, allowing for continuous improvement and greater relevance to participants' needs.

#### Improved Training and Support for Music Champions

- Introduce advanced training modules that cover more complex aspects of music therapy-based sessions and dementia care. This can include techniques for managing challenging behaviours and engaging participants with varying levels of cognitive decline.
- Provide ongoing support and mentorship for Music Champions, including regular check-ins, refresher courses, and peer support groups. This can help sustain their confidence and skills over time.

#### Integration with Broader Care Practices

- Integrate music therapy-based sessions with other therapeutic activities and routines in care homes. Encourage collaboration between music therapists, occupational therapists, and other care professionals to create a holistic approach to dementia care.
- Actively involve family members and caregivers in the music therapy-based sessions. Provide them with training and resources to continue music activities at home, enhancing the overall impact of the programme.

#### Rigorous Evaluation and Reporting

- Conduct more rigorous evaluations, including pre-post controlled studies to establish the causal effects of the Music in Mind programme. This will provide stronger evidence for its effectiveness and inform future improvements.
- Ensure detailed and transparent reporting of the programme's outcomes, including both qualitative and quantitative data. Share findings with stakeholders, including participants, caregivers, and funding bodies, to demonstrate the programme's impact and advocate for continued support.

#### Scalability and Expansion Strategies

Given the national funding secured from the NIHR and the planned rapid scale-up across North West England, it is crucial to develop robust strategies for expanding the Music in Mind programme to additional boroughs and settings. The following recommendations focus on ensuring sustainable growth, maintaining programme quality, establishing ongoing independent evaluations to assess impact, and leveraging learning partnerships.

#### Structured Expansion Plan

- Implement a phased rollout strategy to manage the scale-up effectively. Begin
  with pilot programmes in select boroughs to refine the approach before a
  broader implementation.
- Prioritise expansion to areas with the greatest need and readiness for the programme. Assess the infrastructure, stakeholder support, and existing resources in potential new locations to determine suitability.

#### Standardisation of Core Components

- Develop a standardised framework for the core components of the programme, including session structure, training modules, and data collection methods. This ensures consistency and quality across different settings.
- While maintaining standardisation, allow flexibility for local customisation to meet the specific needs and cultural contexts of new participant groups.

#### Capacity Building and Training

- Establish regional training hubs to provide centralised, high-quality training for Music Champions and staff in new boroughs. These hubs can serve as centre for ongoing professional development and support.
- If not already done so, implement a train-the-trainer model to rapidly build capacity. Experienced Music Champions and trainers can be trained to deliver sessions and provide support in new locations.

#### Ongoing External Independent Evaluations

- Engage an external independent evaluation partner to conduct rigorous assessments of the programme's impact. This ensures objectivity and credibility in measuring outcomes.
- Utilise a mixed-methods approach in evaluations, combining quantitative data (e.g., emotion capture forms) with qualitative insights (e.g., interviews and focus groups) to provide a comprehensive understanding of the programme's impact.
- Establish a regular reporting schedule to share evaluation findings with stakeholders, including NIHR, care homes, and community groups. This transparency builds trust and supports continuous improvement.

#### Appointment of a Learning Partner

- Establish a learning partnership with an organisation experienced in delivering large-scale programmes and evaluations. This partnership will facilitate the exchange of knowledge, best practices, and innovative strategies to enhance programme delivery and impact.
- Develop a collaborative learning framework with the learning partner to ensure continuous improvement and adaptation of the programme based on real-time feedback and evaluation findings.
- Leverage the expertise and resources of the learning partner to address challenges, implement new approaches, and scale the programme efficiently.

#### Implementation Support and Infrastructure

- Form dedicated implementation teams responsible for overseeing the rollout in new boroughs. These teams can provide hands-on support, troubleshoot issues, and ensure fidelity to the programme model.
- Forge partnerships with local organisations, care homes, and health services to facilitate smooth implementation. Local partners can offer valuable insights, resources, and support for integrating the programme into existing care frameworks.

#### Technology Integration

- Leverage technology to support training and ongoing development. Online training modules, virtual workshops, and digital resources can enhance accessibility and convenience for staff in remote areas.
- Implement digital tools for data collection and analysis to streamline processes and improve accuracy. A centralised digital platform can facilitate real-time monitoring and evaluation.

#### Sustainability and Funding

- Beyond NIHR funding, explore additional funding sources to ensure long-term sustainability. Grants, philanthropic contributions, and local government support can provide financial stability.
- Conduct regular cost-benefit analyses to demonstrate the economic value of the programme. Highlighting cost savings in healthcare and improved quality of life for participants can strengthen the case for continued funding.

#### Community Engagement and Awareness

- Launch awareness campaigns to promote the benefits of the Music in Mind programme. Engaging the community increases support and encourages participation from PLWD and their families.
- Establish robust feedback mechanisms to gather input from participants, caregivers, and staff. This feedback is critical for adapting and improving the programme to better meet the needs of the community.

#### Quality Assurance and Continuous Improvement

- Develop and implement quality assurance protocols to monitor programme delivery and outcomes. Regular audits and reviews ensure adherence to standards and identify areas for enhancement.
- Foster a culture of continuous improvement by encouraging innovation and responsiveness to feedback. Regularly update training, resources, and methodologies based on the latest research and evaluation findings.

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# For more information

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