

# Monitoring the Effects of Physical Activity on People Living with Dementia

## Case Study

### Introduction

Dementia is a very emotive long-term condition, which affects families, communities and the wider society. However regular physical activity has been linked with prevention of dementia in older people and in some cases has even been proven to slow down or reverse the impact of the disease on some individuals as well as the impact upon mood, engagement & wellbeing in general. As part of the Mobile Me programme which involved the sustainable delivery of activity sessions in care homes and residential settings across Norfolk, members of the Norwich Medical School at the University of East Anglia undertook research to monitor and test the impact of the sessions on selected residents living with dementia.

This dementia observation programme involved using Dementia Care Mapping in partnership with UEA Medical School, Norse Care and Active Norfolk to enable research to be conducted and conclusions to be drawn about the impact physical activity can have on people living with dementia. Researchers attended sessions delivered by Active Norfolk over the 10-week period and collated anecdotal evidence and observational evidence from selected residents who were known to be living with the disease.

As a result of the research the medical team at the University of East Anglia and Active Norfolk were able to put together a video and report detailing best practice guidance on the delivery of exercise sessions for people living with dementia.

### Method

Due to the nature of the evaluation, ethical approval was obtained from the National Social Care Research Ethics Committee. This approved the use of Dementia Care Mapping as an observational tool, to evaluate the impact physical activity sessions can have upon people living with moderate to advanced dementia. To compensate ethical consent was obtained from the National Social Care Research Ethics Committee.

During observations, two researchers worked simultaneously carrying out Dementia Care Mapping (DCM) and semi-structured observation. As part of the DCM observation, the researcher evaluation behaviour, mood and engagement for between four and five individuals per activity session. While DCM produces quantitative evidence, on this occasion it was used as a qualitative form of research and results are presented as such. The researchers were selected for this programme because of their high levels of experience in working with people living with dementia.



### What is Mobile Me?

The Mobile Me project was chosen as the ideal vehicle for dementia observations as it involved visiting care homes for 10-weeks and offering physical activity sessions to residents, many of who are living with dementia in various stages. The sustainability of the programme was enabled through the upskilling of selected members of staff residents.



## Results and Findings

The results were gathered through the collaboration of researchers and after some consultation with relevant texts for the purposes of context. Overall the findings supported the concept that physical activity can support people living with dementia to have improved mood increased engagement, and a general positive impact on wellbeing were assessed across four key components for the successful delivery of activities which encourage people with dementia to be as engaged as possible and provide the most benefit:

### Environment:

The research found that the environment in which activities are held is crucial to its success in engaging residents and helping them to become active. Environments which were cluttered or provided distractions were not found to be conducive. Equally areas where noise emanated from other rooms or from outside the activity session often caused distraction from the session. Familiar rooms which were uncluttered provided the most engagement and the least anxiety for residents, for everyone

### Atmosphere:

Researchers quickly discovered that creating an atmosphere that was fun, welcoming and relaxed in such a way that each member of the group felt valued presented the best opportunity for the success of each activity session. It quickly became clear that actively considering the involvement of each resident and adjusting the way a session was delivered enabled more wide-spread benefit to all residents, for example arranging the seating in a horseshoe shape encouraged interaction and continued engagement in the activity.

### Adaptations

Physical adaptations used in each session included a bowling ramp to enable even the least active residents to become involved. Through the observation the researchers quickly became aware that moving players away from their seats made them disorientated and unfamiliar and therefore anxious. The bowling ramp helped to alleviate this, and instructors also adapted their delivery technique to move activities to residents, rather than asking the resident to move for example.

### Communication

Communication of the rules of the game was a crucial component of the delivery of each session and in many cases proved to be tricky. Coaches had to use a number of different communication techniques, such as body language and physical displays seemed to have a positive impact on the delivery of sessions.

## Guidance and Influence

As a result of the consultation group a video has been developed which acts as a memoir of researchers' experiences who provide anecdotal evidence on the way that the delivery of activities can be adapted and altered to enable better engagement of people living with dementia. The video has been produced as an easy-to-use way of communicating best-practice techniques for delivering activity sessions to care home residents living with dementia.

The strength of the video is its tone, which speaks clearly and with authority about how the qualitative research enabled residents to improve their health and independence through activity. It is delivered in a way that is approachable to people dealing with older people in these situations on a regular basis without focus on the clinical element of dementia.

One key outcome of this research is the best-practice guidelines for the delivery of activities for people living with dementia. This comprehensive guide will enable the implementation of meaningful physical activity interventions for those living with advanced stage dementia. Following this piece of work, a guide to engaging people with dementia is now available for relevant professionals to access and implement in their own environments.

