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mHEALTH-AD



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Training program for enhancing the
adoption of mobile health technologies
by persons with mild-dementia

DETA 3: mHealth for training health condition



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DESIGNED EXPERIENTIAL TRAINING ACTIVITY 3_mHealth for training health condition

Objectives:

The DETA 3 “mHealth for training health condition” focuses on mobile health solutions to facilitate the wellbeing insights to the health-related conditions of People with mild dementia and to facilitate daily management with caregivers, professionals, etc. as well as mobile health solutions to enhance the planning of daily and/or care activities.

It should summarise the most important and applicable solutions that already exist on the market and support their adoption.

A specific focus is set on promoting a practical understanding of the opportunities for People with mild dementia and carers in order to reduce the barriers to implement mHealth technologies in their daily life (attitude, interface, design, lack of knowledge, limited access to technology, physical/mental limitations). Guidance and support to meet those challenges related to the use of mHealth technology in daily life should be given to participants. Therefore, the usefulness of mHealth solutions will be highlighted as well as how these solutions can improve self-management of people with mild dementia and their relatives or caregivers.

An additional objective of this DETA is to offer contents to support planning activities of people in the initial stage of dementia and provide support to the individuals that care for them.

Participants & roles:

- PWD: 10 persons
- Caregivers:
 - 5 supporters as formal carers or professionals
 - 5 supporters as family members or other informal carers

Competences:

- Increased knowledge about the devices and Apps that are already on the EU market related to well-being and self-monitoring (English, local language)
- Ability to implement these technologies in the daily life activities/planning and care procedures
- Understanding how to expand the planning of care with mHealth technologies
- Increased digital skills of participants

Training contents:

- To get to know different Mobile Health Solutions for wellbeing and health condition (geolocation and navigation tools for the orientation skills and safety; step counting for activity; HBR for wellbeing; sleep monitoring for organizing daily activities and establishing good sleep routine and quality of sleep; Apps helping with nutrition planning; etc.)
- To get a first understanding of planning activities which support People with mild dementia in their daily life activities and / or the (informal) carer in the care procedures
- To identify aspects that can improve with the correct guidance and thus improve the quality



of life of the People with mild dementia

- To distinguish between helpful functions and unnecessary ones in order to present the People with mild dementia only with a preselected application
- Improvement of daily planning and well being
- Guidance and support to meet the challenges related to the use of mHealth technology in daily life.

TOPIC 1: Self-Management and Empowerment (Empowerment and self-management, what it is / How to be empowered and self-manage my health status / Main health areas to take care as older person / Main health areas to take care as People with mild dementia / What roles can play caregivers, relatives and health professionals)

TOPIC 2: What is mobile Health? (Mobile health what is it / Benefits, application / barriers and facilitators / Application of mobile health to People with mild dementia: best practices /what roles can play caregivers, relatives and health professionals)

TOPIC 3: Mobile Health Solutions for People with mild dementia (Structured selection of mHealth solutions)

Duration of each session: 1 hour

- Face to face session: 1 hour
- Online session: 1 hour

Transversal training:

- Digital skills
- Social skills
- Self-Management
- Language skills
- Ability of teamwork (group discussion, experience and knowledge sharing)
- Skills to put theoretical content into practice

Methodology:

- Active and participative
- Face to face training:
 - Dialogue
 - Teamwork
 - Practical activities (Use of different mHealth technologies)
 - Experience sharing
- Online training:



- Videos
- Use of different mHealth technologies
- Workshops

Training materials:

- Face to face sessions:
 - Word or PowerPoint presentations. Explaining the main concepts
 - Survey (printed)
 - mHealth technologies
 - Videos
 - optional: a board to present and write
- Online sessions:
 - Videos
 - PowerPoint presentations
 - Topic related mHealth technologies that can be shared via online session
 - links to the Apps or manufacturer sites

Organizational and technical requirement:

- Computer
- mHealth technology
- room
- documents/ training materials
- sound system
- a board



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FACE2FACE 1.1 SESSION: GUIDELINES, DURATION, AND TOOLS

Action 1. Introduction

FIRST DAY

Duration: 60 minutes

Action 1.1 Opening

- Welcome and get to know each other
- Identification of individual expectations
- Objectives of the session, including learning objectives, activities, and planning

The main objective of this session is to create a positive and relaxed atmosphere for the group. The trainer should present him/herself and start the session with getting to know all the participants. The seating should be aleatory to prevent the separation into three groups (People with mild dementia, supporters as family members or informal carers, and supporters as professionals or formal carers) and avoid stigmatization. At entering the room each participant should receive a clearly readable name tag to facilitate communication. At any time, the trainer should adapt the training to the needs of the participants and adapt the training rhythm accordingly. In order to get to know the participants, the trainer should take turns and direct a welcome to each participant while including some additional information that can be taken from the inscription data to the course. For example, the trainer could say “Welcome to our class Paula and thank you for coming here all the way from ...” to the participant. The trainer should encourage participants to be open to the activities and willing to participate. To achieve this, it is important that he/she encourages people to participate and reassures them throughout the sessions. When finishing the introduction round, the trainer should ask the group on their expectations and hopes for this module. This question should be directed to the entire group in order to avoid that someone feels obliged to answer and is not yet prepared to do so. After receiving an answer, the trainer should repeat this expectation to the rest of the group (e.g. “Does anyone else hope to learn about xxx in this class?”)

Once expectations have been identified, the trainer should start to present the official objectives of the session, as well as learning objectives and planned activities. This presentation should follow a previously structured PowerPoint.

- **Duration:** 10 minutes
- **Tools:** mHealth_PR 3_MODULE 3_V04.pptx

Action 1.2 Introductory sessions - Which mHEALTH technologies exist for training health conditions and planning activities?



In this activity, first of all participants will be asked to share their thoughts on what they think “mobile health technologies” are. It is very important for the trainer to understand at what level the participants understand what mobile health technologies are. Also, the trainer should get a first impression of what the participants know about mobile health so far, and if some of the participants ever have used such technologies. Based on the answers collected, a discussion could be held on whether any of the participants have used any technology in their daily life, if so which one and whether it facilitated them in this particular activity.

Continuously, the trainer will introduce to the participants the first concept of “mHEALTH” technologies, as maybe there will be participants that have no idea about, their application in everyday life and the facilities they can offer in the life of a person with dementia. The level of explanation and how extensive and detailed it will be depending on the level of knowledge of the participants. At this point the trainer could introduce some of the mobile health technologies and explain the possibilities they offer. The trainer also can use the videos or devices to facilitate the understanding.

-BREAK 10 MINUTES-

At this point it would be very useful to have a discussion and get the participants' thoughts on how such technologies could support their daily challenges faced or health. They should understand why it is important to be able to measure health parameters. It is important to have an interactive discussion about physiological and psychological parameters that they could train via mHEALTH technologies. For example, the navigation tools, counts of steps, blood pressure, the levels of glucose or the heartbeats would be very helpful in supporting them to become independent and improve their daily routine. Also, having insight on sleep quality and sleep routine may help on planning the daily activities.

Continuously, there could be an exchange of views on situations whose design and implementation would be facilitated by technology for both health and everyday activities.

- **Duration:** 15 minutes
- **Tools:** mHealth_PR 3_MODULE 3_V04.pptx

Action 2. Concept

Action 2.1 mHEALTH for training health conditions and planning activities

In order for the participants to have a better view and understanding of what mHEALTH technologies are, in this action will be presented some examples and use cases of people that have used these technologies for their daily activities. Examples of everyday life make it easier to understand what mobile health technologies are and how they could facilitate the daily life of a person with dementia.

After that, the trainer should encourage the participants to share their thoughts about use cases that were referred. It would be good to discuss the advantages and disadvantages they think that each use case has. Do they think that the use of such a technology would help them? Are there any



of their daily activities that mobile health technology would make it easier? Are they willing to apply a mHEALTH technology as an assistant tool in order to improve an activity of their life? Do they find it difficult?

In order to have a better understanding of their view on the use of mobile health technologies and ascertain which part of their use find it difficult it would be better for the trainer to ask them why they hadn't previous contact with these technologies. Is it because of the lack of sources of information? Is it because of their lack of Digital skills? Is it because of the lack of digital skills of their supporters? Are the already existing technologies known to them? If they are willing to use mHealth technologies after this training.

The aim of this activity is that at the end of it, the participants will have understood that the purpose of health technologies is to help and facilitate their everyday life.

- **Duration:** 35 minutes
- **Tools:** mHealth_PR 3_MODULE 3_V04.pptx

The trainer should close this session reminding the participants to get together again on the date and hour foreseen for the second day. He/she should ask them, if they want that any part of the module shall be conducted in a different way than it was implemented in this first session.

END OF FIRST DAY

SECOND DAY

Proceed like day 1 e.g. short Welcoming, summary of the first day and continue with the next action points.

Duration: 60 minutes

Action 2.2 Issues & Concerns

On the second day after the trainer will welcome the participants, the atmosphere should continue to be relaxed and positive and also avoid separation of participants into subgroups (patients and carers). At the beginning of this session, it would be good to encourage the participants to share their experience of the first day, how they felt, what they liked, if there was anything they did not like, etc.

Before the second day of the training starts, it is advisable to discuss and solve any questions that may have arisen. It is important that the participants lose their concerns against mHealth technologies. In addition, it is very important to have determined the psychological and physiological factors that will be affected (either positively or negatively) by the use of such a technology. In addition, the parameters that can be controlled should be clarified and, by extension, the control of these parameters should serve to speed up and encourage the individual's independence.

The aim of the next activity is to explore the concept of self-management in the context of mHealth solutions in theoretical and practical ways. As patients and their relatives face different challenges in daily life, both should engage in this topic. The action will consist of three different parts:



2.2.1 Concept of Self-Management

First, the course leader will give a brief theoretical introduction to the topic of self-management, while the main focus should be on self-management regarding healthcare. The participants are asked by the trainer if they already know anything about self-management and if they could explain in short words (brainstorming). Examples from the areas of physical and mental health care will be presented and discussed in the group, so a practical insight is given.

As the topic of daily routines is closely related to self-management and could be quite important in the environment of people with dementia and their relatives, this will also be explained. The trainer should make sure to keep theoretical explanation on a practical and simple level as well as possible.

BREAK 10-15 Minutes

2.2.2 Current Status Self-Management people with dementia/relatives

In the first part, examples for “Best Practice” of self-management were given by the trainer and discussed with the participants. In the second part of this action, self-management will be related to daily life of people with dementia and their relatives. The trainer will lead the participants to reflect upon their current routines, needs and resources regarding self-management in health care. As people with dementia and relatives are both challenged by the physical and mental changes of dementia, it is important that they discuss on this topic together.

BREAK 10-15 Minutes

2.2.3 Creating a Self-Management routine

Creating an Individual Self-Management routine for monitoring health indicators (Practical Part)

In the last part, the participants will prepare one specific content that they could actually implement into their everyday life (e.g. blood pressure, sleep quality, mood, activity, blood glucose level, heart rate, oxygen level, ...). It should be something their relatives could help them with, or even the relatives would like to use as a new routine. The trainer will help to set up one concrete goal (example: “Every evening I will summarise the day in a short diary note in the app”). Additionally, the trainer will show the participants an example on his or her own device. Afterwards, the participants get enough time to work on their individual goal. The trainer will be present for questions the whole period. Finally, the participants can present their individual goal to the whole group. If possible, the participants could also try to actually perform their set action on the devices during the session. The trainer will be available for questions and concerns all the time.

At the end of the session there will be another short summary by the course instructor.

Duration: 20 minutes

Action 3. How mHealth technologies can support people with mild dementia in daily life and health challenges faced?



To finalize this activity the trainer should present different solutions, apps or devices, that can be used to monitor health care parameters. In this action the participants should understand how they will be able to be supported by using an mHEALTH technology. We should explain to them what such an application will help and how it will make it easier for them. An overview about available solutions is presented in the project attachments. The solution itself and its implementation and advantages should be introduced.

If some devices are available on site, they should be tried out together. Furthermore, some videos about mHealth solutions can be shown to introduce some devices.

For example, an app that helps them to check their step counts may facilitate planning the activity, but also encourage and track themselves on how active they are. They may set their own goals. The app for monitoring blood pressure may give them insight into values, for example if it is within normal limits. A technology that helps them to monitor their sugar levels will also be helpful. Similarly, an app that records heart rate readings like a smartwatch would also help their in daily planning and additional activities may be chosen. With the insight into the quality of sleep, they may pay attention into sleep routine (when does the person go to bed, when does he/she wake up), if there are any interruptions etc. and the additional actions may be taken (more daily light exposure, more activity on the fresh air, avoiding meals in the evening, going to the toilet before going to sleep...). With the navigation apps they may build competences to be more confident outdoors. With the apps that help with meals preparation, they may build confidence in regards to the food they choose specifically to their status.

- **Duration:** 20 minutes
- **Tools:** mHealth_PR 3_MODULE 3_V04.pptx

Action 4. Closure

The trainer summarizes the content of the session and tries to clarify possible doubts and questions. After that, a short summary of the training programme is given. Each trainer asks for feedback for the training programme, e.g. with an App! The results of the feedback are presented at the end of the closure.

- **Duration:** 10-15 minutes
- **Tools:** Evaluation questionnaire

Action 5. Home Activities:

Activity to be done on your own at home to practice the training contents.

Choose between:

- Action 1.2: Please write down all physiological and physical parameters, that are important for you/ in your daily routine.
- Action 1.3: Collect with your relative mHealth solutions that could be useful for you and that are affordable/ available.
- Action 1.4: Implement the self-management routine you have developed in Action 1.4.



Action 6. Recommendations for trainers

Key aspects that help to create a positive and fun learning experience:

- appropriate number of the participants
- comfortable learning environment
- simple language
- try to make the activity joyful
- explain clearly the objectives and potential benefits to participants
- motivate participants to engage in brainstorming,
- offer different perspectives or scenarios
- provide time for communication that allows for reflection, debate, and empowerment of the participants
- encourage participants to express their feelings at each part of the activity
- for face-to-face activity, use the round table, prepare snacks and water/tea
- avoid distractions, without loud noises, strong light etc.
- tell stories, use cases.

How to conduct group dynamic activities with people with dementia?

When planning the activity, make sure that it will be simple, but interesting and won't take longer than 30 minutes in total as PwDs tend to get restless in more extended activities. It helps to include daily life objects (watch, cup, etc.) as the person with dementia can relate to them. The focus of the activity should be cooperative and not competitive in order to avoid frustration. Make sure you conduct the activity in a safe environment and don't include rapid movements, tiny objects, etc. When creating the group, ensure participants are at a similar stage of dementia and have comparable cognitive and physical capacities.

Once you conduct the activity, make sure you remain flexible with the implementation and allow changes to content and materials depending on the capacity of the participants. Start off as simple as possible to allow that the PwD has a positive first experience and him/herself feels prepared to conduct this type of activity. Help participants to identify a short-term as well as a long-term goal for the training activity.

If you see that participants can go on longer than planned, congratulate them on their capacity to focus and extend the activity a little.