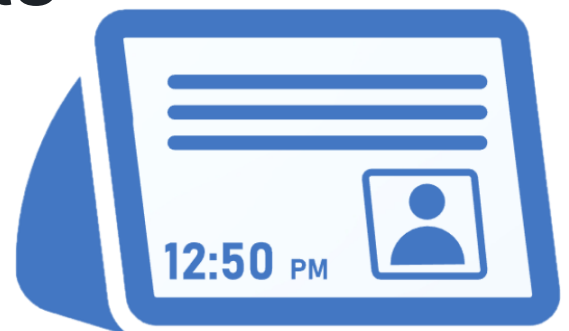




InfoCARE | Supporting Informal  
Caregivers of People with Dementia

## MODULE 2

# Remote and Digital Stimulating Activities for Dementia Patients



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InfoCARE | Supporting Informal  
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## PROJECT INFORMATION

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@infocareproject

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### INTRODUCTION

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In dementia care, non-pharmacological intervention and approaches are preferable to deal with the symptoms of dementia like reduce responsive behaviours, improve/maintain functional capacity and cognitive impairments, and reduce emotional symptoms (Meyer & O'Keefe, 2020). Nowadays, many software and digital devices are used as non-pharmacological tools in order to support caregiving of people with dementia. These new technologies aim to be more affordable and widely available in order to achieve greater health equity and quality of life for all. that will allow caregivers to achieve these goals (Lee-Cheong, et al, 2022). In this direction, smart devices with integrated virtual and voice assistants are preferable, since they offer a variety of functionalities that effectively support caregiving duties in many senses (remote and face-to-face caring, cognitive stimulation, etc) and can be used in an easy and intuitive way (Luscombe, et al, 2021).

The InfoCARE project and its results aim to assist caregivers of people with dementia by employing new technologies, in the daily care activities. More specifically, Project Result 2 aims to:

- › Enhance the quality of support they provide to the person with dementia they care for.
- › Improve caring and assistance conditions.
- › Ease and support their caregiving duties, as well as their daily tasks, which ultimately will decrease the burden they feel.
- › Give practical responses to social distancing, isolation, and long distances, by improving remote caring.
- › Reinforce the bonding between the carer and the person with dementia.

This manual is part of the InfoCARE Project Result (PR2) training materials and aims to be a practical tool for informal caregivers, legal guardians and relatives of people with dementia to learn how to use digital devices, like Amazon Echo Show device and Alexa´s virtual assistant, in order to implement activities with people with dementia. It will mainly focus on the development of each activity to support caregivers with practical issues. This manual aims to explain participants on how to navigate into the videos of PR2 and how to implement the activities with people with dementia by giving specific advice and directions.

By reading this manual, you will:

- › Be aware of the significance and advantages of using the video-activities and smart devices in dementia care.
- › Learn what is needed and the necessary steps to set up and use the video-activities by utilising the Amazon Echo Show device and Alexa´s virtual assistant.
- › Get familiar with the non-pharmacological interventions for dementia care by using new technologies.

This manual also includes a series of video tutorials that will help you to get familiar with the video-activities and explore its possibilities, enabling a more interactive and enriching learning experience.

## CHAPTER 1. Dementia activities by using new technologies

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### 1.1. Dementia activities as a therapeutic tool

There are many activities a person can do with someone who has dementia by using new technologies. The Alzheimer's Association notes that participating in activities can help a person with dementia by:

- › improving quality of life
- › reducing behaviours such as agitation or wandering
- › providing a sense of accomplishment, purpose, usefulness, or engagement
- › enhancing a sense of dignity and self-esteem
- › providing a sense of normality

Research from 2020 also found that participating in activities outside of care facilities helped improve the psychological and physical health of people with dementia (D'Cunha, et al, 2020).

There are also many other publications that highlight many non-pharmacological approaches and activities that can be effective in reducing responsive behaviours, improving/maintaining functional capacity, and reducing emotional disorders. These approaches are often preferred over pharmacological approaches because they typically have fewer side effects and are less invasive. Some examples of non-pharmacological activities that can be used to reduce responsive behaviours in individuals with dementia include:

1. **Environmental modifications:** Changing the environment to reduce sensory stimulation, provide structure and routine, and improve safety can be helpful in reducing responsive behaviours.
2. **Behavioural interventions:** These may include identifying and addressing triggers of responsive behaviours, implementing positive reinforcement strategies, and using redirection techniques.
3. **Cognitive interventions:** These may include cognitive stimulation activities, reminiscence therapy, and reality orientation therapy.
4. **Social interventions:** These may include socialisation activities, group therapy, and support groups for both individuals with dementia and their caregivers.
5. **Music therapy:** This can be helpful in reducing anxiety and agitation in individuals with dementia.

In addition to reducing responsive behaviours, non-pharmacological approaches can also improve/maintain functional capacity in individuals with dementia. Some examples of these approaches include:

1. **Occupational therapy:** This can help individuals with dementia maintain their ability to perform activities of daily living and improve their overall functional capacity.
2. **Physical exercise:** This can improve physical function and reduce the risk of falls in individuals with dementia.
3. **Cognitive training:** This may include activities to improve memory, attention, and problem-solving skills.

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Finally, non-pharmacological approaches can also be effective in reducing emotional disorders such as depression and anxiety in individuals with dementia. Some examples of these approaches include:

1. **Behavioural activation:** This involves encouraging individuals to engage in activities that they enjoy and find meaningful.
2. **Reminiscence therapy:** This can help individuals with dementia process and cope with difficult emotions related to past experiences.
3. **Cognitive-behavioural therapy:** This can help individuals with dementia identify and change negative thought patterns that contribute to emotional disorders.
4. Overall, **non-pharmacological approaches** can be an effective way to reduce responsive behaviours, improve/maintain functional capacity, and reduce emotional disorders in individuals with dementia (Meyer & O'Keefe, 2020; van der Steen, et al, 2018).

### 1.2 How we combine dementia activities with smart devices - Short description of Project Result 2 (PR2)

Extensive training of carers on the possibility of including new technologies to perform activities aimed at looking after people with dementia has not been sufficiently developed yet. Thus, there is an increased need to focus more on the training of caregivers on how to use technological devices to perform dementia activities. The Project Result 2 (PR2) of InfoCARE focuses on dementia activities and includes all the relevant information on how to implement dementia activities by using smart devices. It is a practical response to the COVID-19 pandemic and the restrictive measures that have intensified the stress and burden for those families taking care of a relative suffering from dementia. Therefore, this result displays a very innovative element, and it is adaptable both to in-person and remote caring measures. In particular, it aims to:



- Adapt the activities of Project Result 1 (PR1): Training on Cognitive activities - Mind-Stimulating Activities for Dementia Patients, in a way that they can be performed remotely with the support of new technologies and devices such as Amazon Echo Show or Spot and Google Nest Hub.
- Equip the carers of people with cognitive impairment and/or dementia with a practical response to social distancing and isolation, due to the current health crisis by employing new technologies, in the daily care activities.
- Improve social interaction between people suffering from dementia and their informal carers and families, as a response to social distancing.
- Include additional activities that can be performed, and the result can become training material for nursing and residential care facilities as well as NGOs and organisations working with seniors and people with dementia.

PR2 manuals will contribute to:



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- Increase digital literacy in informal carers looking after people with dementia.
- Enhance quality of support that families and professionals working with people with dementia provide them.
- Acknowledgement of the difficulties related to advanced stages of dementia and how to treat it adequately.
- Intensify social interaction between people suffering from dementia and their families/informal carers despite social distancing, thanks to new technologies.
- Eased stress and burden on a psychological, emotional, financial point of view thanks to non-formal education and new technologies.
- Enhanced caring and assistance conditions for caregivers.

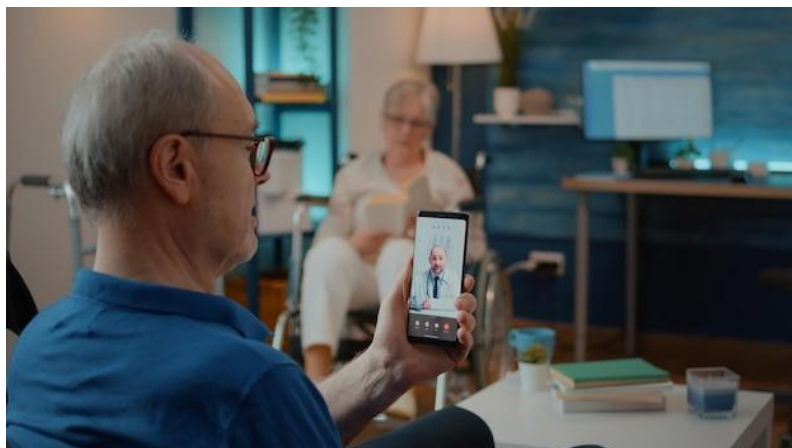
The PR2 is structured as follows:

- Module 1: - **Manual and a set of videos on Digital Literacy for Caregivers of Dementia Patients**: basic digital skills to use one of the technologies suggested for remote caring (Amazon Echo Show and Alexa's virtual assistant).
- Module 2: **Manual and a set of videos on Remote and Digital Stimulating Activities for Dementia Patients**: Adaption of the activities included in [Project Results 1](#) - Modules 3 and 4 - for remote and digital implementation.

In this Manual, we will focus on giving more information on Module 2 and how to carry out these activities remotely by using Amazon Echo show device, a similar digital device of your choice or even video call software.

Most of the activities proposed in this manual can be carried out remotely by using a smartphone on the caregiver's end and the Amazon Echo Show device on the person with dementia's end. Both devices can be easily connected through a video call by using Amazon's drop-in function through Alexa App (consult Module 1 to get details on how to set it up). For some of the activities, the full remote implementation is not possible, thus, alternatives on how to perform them with the support of digital devices and software are described as well.

We need to clarify that not all the activities proposed in this manual can be performed remotely and, for those, alternatives on how to perform them face-to-face with the support of digital devices are provided.



## CHAPTER 2. REMOTE ACTIVITIES FOR EARLY-STAGE DEMENTIA

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**Important note:** *For the purposes of the InfoCare project, descriptions are given for implementing each activity using the Amazon Echo Show device. Other devices and/or video calling software can be used to perform the activities remotely.*

### 2.1 Reality orientation in current news

**Type:** Cognitive stimulation.

**Mode of implementation:** Remote.

**Goal/Benefits:** mental abilities e.g orientation, concentration, memory, speech and ability to interact.

**Time:** Although the suggested time for this activity is 40 minutes, you can adapt it according to the level of impairment and how well the person interacts through the digital device.

If the person starts feeling anxious and you notice the activity is too challenging for them, you can stop the activity and re-conduct the dialogue to a topic that is more pleasant for the person.

**Prerequisites:**

1. Both devices are connected through the drop-in function or a video call, in case you opt for another digital device.
2. Newspaper, news broadcast available either on TV or radio
3. If you opt for the radio or TV broadcast, make sure that both radios/TVs are turned on and that you are watching the same news broadcast.
4. The person can see and hear you properly through the screen.
5. The person is relaxed and motivated to engage with the activity.

**Description:** This activity will help the person with dementia feel included and updated on the events happening around the world. Furthermore, the events discussed may remind them of other events which can make them feel happy about sharing their knowledge on a particular subject. Grab a newspaper from that date and begin discussing an event described in it. Alternatively, you can watch a news broadcast or listen to the news on the radio together and discuss events mentioned here. Start by asking the person to talk about himself/herself (eg name, place of birth, hobbies etc) and current date time. Then you can choose a current topic to discuss. You can also ask him/her find a strategy to memorise an item that is an typical feature of the topic ( eg fireworks) so he/she can recall the item later by writing it down on a paper when asked. This activity can be performed remotely either using the Amazon Echo Show or any other video call software.

**How to perform the activity:** After setting up the devices and making sure the person is responding, you can start encouraging the dialogue and gradually engaging the person into the activity with questions such as:

*What do you think about the broadcast?*

*Which events were mentioned in the newspaper?*



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*Were there any particular events that you noticed in the broadcast?*

*Did any of the events remind you of a previous event? If yes, can you elaborate?*

*What was your favourite or least favourite part of the broadcast?*

**Tips and recommendations:** Choose any topic, depending on the current affairs. If he/she can't find a strategy to remember the item, you can provide him/her with a strategy (eg the word starts with the letter "F"). To increase difficulty, you can request him/her to perform some hand movements (eg opening and shutting palms) while giving answers to your questions on the topic (eg what do we do in New year's eve?). If the person with dementia has vision and/or hearing problems, make sure they have their glasses or hearing aids in hand. If you use Amazon Echo Show, in advance, while setting up the device for the person you care for, make sure the volume is correctly set and the device is paired with your mobile phone, as well as that the drop-in function and permissions are correctly set up.

**Personalise the activity:** You can adjust the activity according to the preferences of the person with dementia. For example:

- If the person is used to listening to the news on the radio, the best way to approach this activity may be to choose a radio broadcast.
- If they subscribe to a specific newspaper, you may take your departure from the news in that newspaper as it will make the activity easier, since they will automatically have the newspaper by hand and the structure and layout of the newspaper will appear familiar to them.



The screenshot shows a video player interface. At the top, there is a black bar. Below it, a white box contains the text "Description of the activity: 'Reality orientation in current news'" next to a "NEWS" icon. To the right of this box is a vertical blue bar with the text "Reality orientation in current news" and a small globe icon at the bottom. Below the white box is a circular video frame showing an elderly woman with glasses. To the right of the video frame, there is text describing the activity: "This activity will help the person with dementia feel **included and updated** on events happening around the world. Furthermore, the events discussed may remind them of other events which can make them **feel happy about sharing their knowledge** on a particular subject."

[Link to the activity video](#)

### 2.2 Hobbies

**Type:** Reminiscence

**Mode of implementation:** Mixed. Options for both remote and in person (with physical presence of the caregiver and the person with dementia).

**Goal/Benefits:** Emotional and behavioural benefits, elicit emotions and memories, provide entertainment and promote interconnection with the caregiver.

**Time:** Depending on the chosen options. 20min - 1hr.

**Prerequisites:** In order to perform the activity, make sure the following prerequisites are met:

1. The person should be able to listen and see the screen.
2. The person should be relaxed and motivated to engage with the activity.
3. Briefly explain the activities you are doing or will do with the digital device to the patient and attract his/her interest.
4. If the person with dementia has vision and/or hearing problems, make sure they have their glasses or hearing aids in hand.

The materials you will need for this activity may vary according to the hobbies of the person with dementia. For example, for a patient who likes to cook or eat, you can play a video of their favourite dish. In this way, you can change his/her focus and try to make this dish together. For this, you may need to obtain the necessary materials for cooking.

For a patient who has a hobby of knitting, you can play videos showing various knitting techniques. Since he/she is still in the early dementia period, you can try to knit together as much as his/her motor and cognitive abilities.

**Description:** Focus on a hobby that they used to enjoy and encourage them to talk about it (eg cooking). You can use relevant items to promote discussion (eg favourite herb). It's important to choose a hobby that the person knows and enjoys, as they will be more likely to react positively to it.

#### **How to perform the activity:**

Option 1: Watching a video about their hobby. For example, if you have a relative who loves to eat or make pasta, you can evaluate the options by commanding the device "Alexa, open a video on how to make pasta from Youtube". By providing the ingredients in a video that interests you, you can follow the instructions one by one. Thus, you will have done an activity and you can easily continue this activity with the video you watch. This option cannot be done using the drop in or call function of the Amazon echo show remotely. Other video calling software (eg Skype, Zoom etc) can be used for implementation or with physical presence using the device.

Option 2: Watching a movie. Since watching movies is one of the common hobbies, you can watch many movies with your loved one with dementia through Amazon Echo Show. Amazon offers you many options in this context. Using voice commands, you can discover films, documentaries and short videos on different themes. For example, when you command "Alexa, find comedies", Alexa will list the comedy content you can watch. You can choose one of them and watch it together. This option cannot be done using the drop in or call function of the Amazon

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echo show remotely. Other video calling software (eg Skype, Zoom etc) can be used for implementation or with physical presence using the device.

*Option 3: Drop-in-Talks.* You can have short conversations about the hobbies you do together. Using the Drop-In function of the Amazon Echo Show can be very useful in this respect. Based on the examples given earlier, you can ask an easy detail about the meal made or a question about the film watched. Thus, you can have a conversation in which you can test the cognitive capacity of your relative with dementia. Making the patient with dementia feel that they are answering the questions correctly will increase their self-confidence and may cause them to have a high mood in their daily life. This option can be done remotely using the amazon echo show device and its features or any other calling software (eg. Skype, Zoom etc).

**Tips and recommendations:** You can give clues to the patient about the planned activity. You can make more favourable video selections by watching the videos that should be opened about the patient's hobbies alone in advance. People with beginning or moderate dementia perceive activities better by seeing and watching them. Therefore, it is very important to do the planned activities with them and to perform all the movements in an orderly manner in accordance with the rules for a healthier activity.



The image is a screenshot of a video titled "Hobbies". The title is in a large, bold, blue font at the top left. To the right of the title is a lightbulb icon with a list of items inside it. Below the title, there is a white text box with three paragraphs of text. The first paragraph says: "A regular hobby can help with fighting some symptoms of dementia, such as depression." The second paragraph says: "It can also help in regulating the diet." The third paragraph says: "Hobbies encourage people with dementia to engage in mutual dialogue, commit to an activity and sustain attention." To the right of the text box is a video frame showing a woman with grey hair wearing large black headphones and clapping her hands. She is smiling and looking towards the right. A vertical blue bar on the right side of the video frame contains the word "Hobbies" in white. The entire video frame is set against a black background.

[Link to the activity video](#)

### 2.3 Photo album

**Type:** Reminiscence

**Mode of implementation:** Mixed. Options for both remote and in person (with physical presence of the caregiver and the person with dementia).

**Goal/Benefits:** Emotional and behavioural benefits, elicit emotions and memories, entertainment, promote interconnection with the caregiver. Train memory and remember different people, moments or places, reinforcing the memory bonds.

**Time:** Although the suggested time for this activity is one hour, you can adapt it according to the level of impairment and how well the person interacts through the digital device.

**Prerequisites:**

1. Both devices are connected through the drop-in function or a video call, in case you opt for another digital device.
2. The person can listen and see you properly through the screen.
3. The person is relaxed and motivated to engage with the activity.
4. The selected photos are at hand, so the person with dementia can easily find them.

**Description:** Photo Album is a reminiscence activity suitable for people with dementia, as it helps them to train the memory and remember different people, moments or places, reinforcing the memory bonds. First of all, you have to make sure the person with dementia has the photo album close, so then you can start. There are two options for developing the activity, one option is to ask them to look for several targets, such as people, moments, or different places where they have been and helping them train the memory through the images, creating their own story with the photos.

Another option is to let the person freely pick one photo and ask them questions about the chosen photo. This is a less structured way to perform the activity, but if the cognitive impairment is severe, it could be a better way to work with them.

This activity also stimulates visual memory, episodic memory and recalling, especially of the long-term memory. Depending on the level of impairment of the person, the activity should be adapted by changing the kind of questions.

**How to perform the activity:** To perform the activity you have to start the video call using the drop-in function and ask the person with dementia to pick the photo album or albums. Then, engage them to choose some photos they like of different pages or albums, until they pick at least 10 photos. This can be performed by either 1) remotely; using the amazon echo show device and the person has physical access to the photo album, 2) remotely; using any video calling software which allows for screen sharing so they can both look at the photos at the same time, 3) in person using the amazon echo show device ; the caregiver and the person with dementia are both present in the same room and are using the device to access photos on the photo album of the device.

Once the photos are selected, the activity consists of engaging the person with dementia in a conversation about them, by asking questions such as:

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*Do you remember that trip? What happened that day? Do you remember Silvia lost the bag in the park? How did we find it?*

*Who's that person next to me? Do you remember the last time you saw her? Did you enjoy that day?*

*Where do we take this photo? How many years do we live in that house?... and so on.*

Another way to perform the activity: instead of letting the person choose the photos freely, is to ask for several targets in order to check out if the person recognises the targets (people, moments, places).

For example, you can ask the person to pick photos of:

*A relative (for example: sister)*

*A friend (for example: university colleague)*

*A pet (for example: dog)*

*A trip (for example: holiday vacation at the beach)*

*A significant place (for example: an old house)*

*A specific party through the years (for example: Christmas)*

*A specific year (for example: only photos of 2003)*

If the person does the activity well and finds the correct targets, you can engage them in a longer conversation about the photos they pick. If the person cannot perform the activity, you can change to the other option and let the person choose freely the photos they prefer.

**Tips and recommendations:** Take into account that the best way to train the memory is to practise the activity frequently in order to revisit the memories connected to the photos to reinforce the created bonds. Depending on the level of impairment, you should do it weekly or even daily. And also, to keep it interesting, don't use the same set of photos every day and ask for different life moments (childhood, adolescence and adulthood) or important moments (births, jobs, friends, marriages or family parties, travels...) changing the topic each day. It's also important to avoid stirring up painful and sad memories and try to remember the good moments. If a sad memory comes up, accompany the person and show your empathy, making the person feel understood and comfortable; but it's preferable to carry out this exercise with happy and cheerful moments. Also, if the person cannot communicate verbally, focus on giving them the pleasure to recall their past, even if he cannot share it.

**Personalise the activity:** Focus on a hobby that they used to enjoy and encourage them to talk about it (eg cooking). You can use relevant items to promote discussion (eg favourite herb). It's important to choose a hobby that the person knows and enjoys, as they will be more likely to react positively to it.

**Items/time needed** 



| Photo Album

[Link to the activity video](#)



### 2.4 What does it do?

**Type:** Reminiscence

**Mode of implementation:** Remote.

**Goal/Benefits:** Besides memory, this activity stimulates other cognitive functions such as attention and reasoning. If the person still has mobility, it can also help with physical stimulation.

**Time:** The suggested time for this activity is 20 minutes, but you can adapt it according to the level of impairment and how well the person interacts through the digital device.

**Prerequisites:** To perform the activity remotely, make sure the following prerequisites are met:

1. Both devices are connected through the drop-in function or a video call, in case you opt for another digital device.
2. The person can listen and see you properly through the screen.
3. The person is relaxed and motivated to engage with the activity.
4. The objects selected for the activity are at hand, so the person with dementia can easily find them.
5. If the person has vision or hearing problems, make sure they have their glasses or hearing aids in hand.

To make it easier: If you use an Echo Show device, in advance, while setting it up, make sure the volume is correctly adjusted, the device is paired with your mobile phone, as well as that the drop-in function and permissions are enabled

**Description:** What does it do is a reminiscence activity that helps people with dementia to keep remembering the use of everyday objects. The activity consists of choosing objects that the person uses every day and whose functions they still remember. The items need to be chosen by the caregiver in advance and shown to the person with dementia on the camera. They can be personal hygiene items such as a toothbrush or a comb, as well as clothes, kitchenware, etcetera. Once the objects are selected, the activity consists of engaging the person in a conversation about the objects, by asking questions such as:

*What is the name of the object? or What is the object used for?*

**How to perform the activity:**

After setting up the devices and making sure the person is responding, you can start encouraging the dialogue and gradually engaging them into the activity with questions such as:

*What object do you use to brush your teeth?*

*Can you tell where you place it?*

*Can you bring and show me the object?*

*Can you put it back in its place?*

If the person starts feeling anxious and you notice the activity is too challenging for them, you can stop the activity and re-conduct the dialogue to a more pleasant topic.

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**Tips and recommendations:** It is better to use the functional objects that the person used to use prior to dementia such as a comb or certain coffee cup.

### **Personalise the activity:**

You can add different levels of difficulty:

If the person has limited physical mobility or is living in a care centre, you can just show them pictures of the objects through the device instead of asking them to find and bring the objects.

If the person is still living in their home and can move, you can ask them to move through the house, find and bring the object before starting the conversation, and put it back in its place once the activity ends.

If the person is responding well to the activity, you can increase the number or the difficulty of the questions, for example, by asking them to describe the process and connect the object with routines, by asking questions such as:

*How do you brush your teeth?*

*What other elements do you need to brush your teeth?*

*How many times a day do you do it?*



The image is a screenshot of a video interface. On the left, there is a white box with a red border containing the following text:

**WHAT DOES IT DO?**

**Description of the activity**

Once the objects are selected...

Engage the person with dementia in a conversation about the objects.

*What is the name of the object?*

*What is the object used for?*

On the right side of the video frame, there is a close-up of a woman with blonde hair, resting her chin on her hand and looking thoughtful. A vertical blue bar on the far right contains the text 'What does it do?' and a small logo at the bottom.

[Link to the activity video](#)

### 2.5 Chair exercises

**Type:** Physical

**Mode of implementation:** Remote.

**Goal/Benefits:** These exercises are aimed at building or maintaining muscle strength and balance, and are less strenuous than exercises in a standing position. They can be part of a developing programme, with the number of repetitions of each exercise increased over time.

**Time:** The time we need for all these activities is about 20 minutes. Of course, this time may vary according to the situation and exercises chosen.

**Prerequisites:** In order to perform the activity remotely with a digital device, make sure the following prerequisites are met:

1. Both devices are connected through the drop-in function or a video call, in case you opt for another digital device.
2. The person can listen and see you properly through the screen.
3. The person is relaxed and motivated to engage with the activity.
4. The person has a chair at hand.
5. Ensure that the person who is going to perform the movements wears comfortable clothes. The movements that we are going to perform require some flexibility.
6. *Optionally*, dumbbells or resistance bands can be used. Make sure that they are not very heavy and are easy to lift and move.

**Description:** People with dementia can benefit from a regular programme of seated exercise sessions at home or with a group at a local class. It is often a good idea to see these exercises demonstrated at least once by an instructor or on a video. The caregiver can have the role of the instructor for the person with dementia, showing the exercises on the camera. There are examples of some functional chair exercises and how to perform them in the video that you will find at the end of this section. It is important to remember that it is quite possible to vary these exercises.

**How to perform the activity:**

Exercise 1: Extended Leg Raises

Instructions:

1. Sit comfortably on the chair, making sure your back is straight and your chest is out.
2. Place both of your hands at the sides of the chair.
3. Put both of your feet far out in front of you with your toes pointing forwards, and make sure your feet are diagonal to your hips.
4. Lift one of your legs up, and then slowly lower it back down to its starting position.

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### Exercise 2: Seated Knee-to-Chest

Instructions:

1. Sit comfortably on the chair and make sure your back is straight and your core is tight.
2. Place both of your hands at the sides of the chair and grip it for stability.
3. Put both of your feet in front of your body and point your toes upwards. Make sure your feet are positioned diagonally to your hips.
4. Slowly lift both of your legs up while bending your knees. Then, slowly bring them back down to the starting position by performing the same motion in the opposite direction.

### Exercise 3: Seated Shoulder Press:

Instructions:

1. Pick a pair of lightweight dumbbells and hold them at the same length on each side of your body.
2. Sit comfortably on the chair, ensuring that your hips are pushed far back, and your back is firmly supported by the backrest of the chair.
3. Tighten your core muscles.
4. Raise the dumbbells up above your head with your arms extended fully and parallel to each other.
5. Slowly lower your hands back down to the starting position.

### Exercise 4: Seated Chest Press.

Instructions:

1. Get a resistance band and place it behind the chair at a fixed point so that it cannot move.
2. Sit comfortably in the chair with your hips pushed back as far as possible, and ensure that your back is firmly supported by the backrest of the chair.
3. Keep your palms facing downwards with your elbows bent and parallel to your shoulders. Position your hands just outside your shoulder width.
4. Push the resistance band forward until your arms are fully extended in front of your body, but don't let your hands touch each other.
5. Slowly return to the starting position.

**Tips and recommendations:** If the person with dementia has vision and/or hearing problems, make sure they have their glasses or hearing aids in hand. While performing these exercises, you should always remember that:

People with beginning or moderate dementia perceive activities better by seeing and watching them. Therefore, it is very important to do the planned activities with them and to perform all the movements in an orderly manner in accordance with the rules for a healthier activity.

**Personalise the activity:** If you are using Amazon Echo Show, you can take advantage of features of your device such as "Body Works: Senior Workout" as it offers a functional Workout programme especially for patients with early-stage dementia. You can also find more workouts online and prepare them for the activity.



[Link to the activity video](#)

### 2.6 Common object textures

**Type:** Sensorial

**Mode of implementation:** Remote.

**Goal/Benefits:** Besides memory, this activity can also reduce anxiety and agitation, bring calm and stimulate visual and tactile senses. Depending on the level of mobility of the person, it can also help with physical stimulation.

**Time:** Although the suggested time for this activity is 20 minutes, you can adapt it according to the level of impairment and how well the person interacts through the digital device.

**Prerequisites:** In order to perform the activity remotely with a digital device, make sure the following prerequisites are met:

1. Both devices are connected through the drop-in function or a video call, in case you opt for another digital device.
2. The person can listen and see you properly through the screen.
3. The person is relaxed and motivated to engage with the activity.
4. Two identical sensory boxes. The selected items can be placed in a box (e.g. a shoe box) and so the person with dementia can easily find them by getting directions to locate the box. The caregiver should also have an identical box on their end.

**Description:** Common object smells and textures is a sensorial activity that can elicit positive memories for people with dementia, bringing them comfort and ease. The activity consists of choosing commonly used items that have distinct scents and textures which the person could identify and differentiate. For instance, these items can be herbs that they used to use in their cooking and/or different fabrics e.g velvet, cotton, satin. Once the items are selected, they can all be placed in a box to create a collection of items to be used for the activity. This sensory box must be placed in a safe and easily accessible location for the person with dementia. An identical sensory box should be used by the caregiver. Once both the caregiver and the person with dementia have the box, the activity consists of engaging the person with dementia in a conversation about the items, by asking questions such as: *What is the name of this item? Or Do you have an item like this one in your box?*

The caregiver brings an item out of the box and shows it on the camera to their loved one. Other questions can be used, like: *What is the object used for? Or How does it smell or feel?*

**How to perform the activity:** After setting up the devices and making sure the person is responding, you can start encouraging the dialogue and gradually engaging the person into the activity with questions such as:

- *Can you find the sensory box?*
- *Can you bring it and show me the items?*
- *What does this fabric feel like?*
- *What does this herb smell like?*
- *Can you put it back in its place?*



**Tips and recommendations:** If the person with dementia has vision and/or hearing problems, make sure they have their glasses or hearing aids in hand. If you use Amazon Echo Show, in advance, while setting up the device for the person you care for, make sure the volume is correctly set and the device is paired with your mobile phone, as well as that the drop-in function and permissions are correctly set up. If the person starts feeling anxious and you notice the activity is too challenging for them, you can stop the activity and re-conduct the dialogue to a topic that is more pleasant for the person.

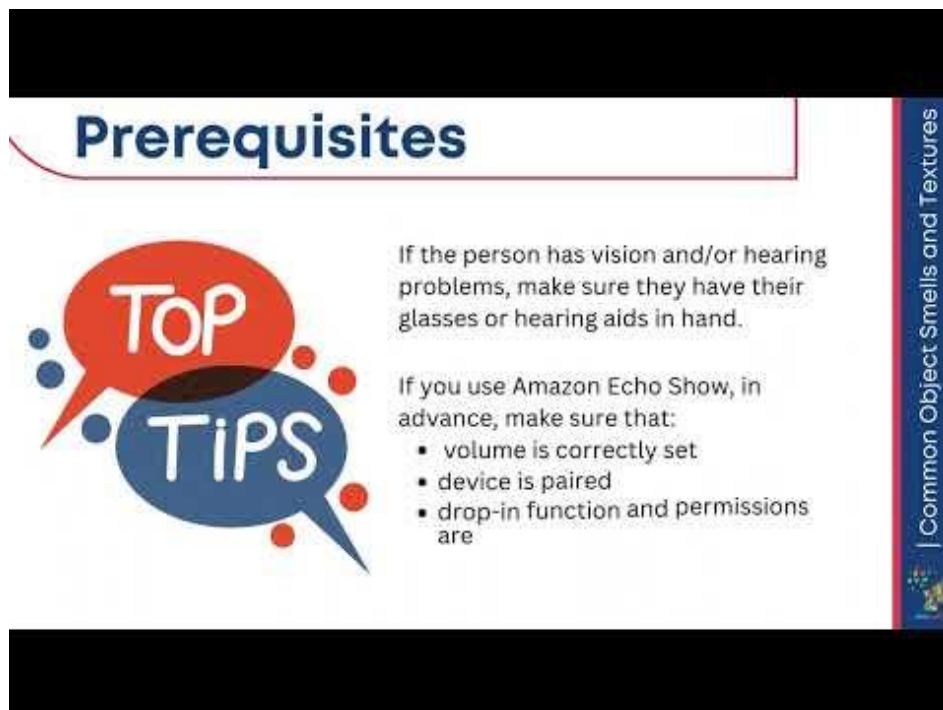
**Personalise the activity:** you can also add different levels of difficulty:

- › If the person has limited physical mobility or is living in a care centre, you can just show them pictures of the objects through the device instead of asking them to find and bring the sensory box.
- › If the person is still living in their home and can move, you can ask them to help you create the sensory box. They could move through the house, find and collect items for the sensory box. When the sensory box is finished, you can make a list of the items that your loved one collected and make an identical sensory box for your end to have in place.
- › You could also ask them to bring the sensory box before starting the conversation, and put it back in its location once the activity ends.
- › If the person is responding well to the activity, you can increase the number or the difficulty of the questions, for example, by asking them to describe the process and connect items in the sensory box with routines, uses and memories eg:

*What kind of clothing is made of this fabric?*

*When do you usually wear that kind of fabric?*

*How many items made of this fabric do you have?*



**Prerequisites**

**TOP TIPS**

If the person has vision and/or hearing problems, make sure they have their glasses or hearing aids in hand.

If you use Amazon Echo Show, in advance, make sure that:

- volume is correctly set
- device is paired
- drop-in function and permissions are

Common Object Smells and Textures

[Link to the activity video](#)

## CHAPTER 3. REMOTE ACTIVITIES FOR ADVANCED STAGE DEMENTIA

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### 3.1 Music therapy

**Type:** Cognitive

**Mode of implementation:** Mixed. Options for both remote and in person (with physical presence of the caregiver and the person with dementia).

**Goal/Benefits:** Listening to music or doing musical activities—for example, singing, dancing, or playing an instrument—can help people with dementia develop and maintain relationships with others and improve their well-being. Music can have a positive effect on people's mental abilities and improve attention and concentration, cognition (thinking), memory, speech and nonverbal communication skills:

**Time:** The time can be adjusted but it is considered as 20 minute activity.

**Prerequisites:**

1. Your smartphone should have the “Alexa app” installed.
2. The device should be “connected to the internet” via WiFi.
3. Then the “app” and your “device” must be paired.
4. The caregiver’s device should be capable of opening remotely the Amazon music or music apps linked to Amazon Echo Show.
5. Search engine access of the device to look for music/songs such as Google play music.

**Description:** Music therapy is a research-based practice and profession in which music is used to actively support people as they strive to improve their health, functioning and well-being. Music Therapy is commonly used as an intervention for people living with dementia to reduce agitated behaviour and improve communication. In the absence of a Music Therapist, you can still successfully incorporate music activities into your activity programs. Regular music sessions with familiar music are a wonderful way to positively influence mood and behaviour. This cannot be performed remotely using the amazon echo show device, instead it can be performed by either 1) remotely; using any video calling software which allows for screen sharing so they can both listen at the music at the same time, 2) in person using the amazon echo show device ; the caregiver and the person with dementia are both present in the same room and are using the device to access music on the device.

**How to perform the activity:** With voice commands tell the device to open the app (Youtube, Spotify, Apple Music etc.) such as: *Alexa open Spotify.*

You can start the session by asking the person which song she/he would like to hear.

With the voice command tell the device the song or album or artist’s or playlist’s name, such as; Alexa "Play Adele" or "Play Sweet Dreams" or "Play chill music."

You can also use voice commands like: "Stop" or "Pause."

"Play" or "Resume" to control.

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Or if the person with dementia does not like the song you can use the voice command "Skip this song."

Try to engage the person by asking them what the song reminds them of. You should encourage them to reminisce and sing-along with you.

You can ask questions like "*Who is this artist?*" for the engagement.

Sing the song and leave a few words at the end for your loved one to finish.

If the person has difficulty singing try humming or la-laing.

**Tips and recommendations:** Run sessions once a week or more, depending on time available. At the end of each session take notes and report your observations in your Progress Notes. If interaction is not possible due to medical diagnosis, use the same process of talking to the person with dementia and explaining what you are playing next. You may be surprised at the shift in alertness and eye contact in some people with dementia when the music is heard. If you get that sort of reaction, you have achieved one of your goals. Keep on singing/playing music and wait patiently for a response. If no response is received don't assume it didn't work; come back the following week and try again.

**Personalise the activity:** It's often easier for them to recall memories when they hear pieces of music that are important to them—perhaps their favourite song from the past or a lullaby they sing to their children. When music preferences cannot be established, choose popular music from the time the individual was between 15 to 35 years old.



**Description of the activity: Music therapy**

Play a meaningful song and try to engage them in singing, moving.

This activity helps to develop and maintain relationships with others and improve well-being. Positive effect on mental abilities, attention and concentration, cognition (thinking), memory, speech and nonverbal communication skills.

Music therapy

[Link to the activity video](#)

### 3.2 Pictures/videos of the past

**Type:** Cognitive

**Mode of implementation:** Mixed. Options for both remote and in person (with physical presence of the caregiver and the person with dementia).

**Goal/Benefits:** This activity evokes memories, stimulates mental activity, improves well-being.

**Time:** The time can be adjusted but it is considered as a 30-minute activity.

**Prerequisites:**

1. Caregiver's device should be capable of opening Amazon photos with voice commands.
2. Caregiver's device should be connected to personal cloud photos.
3. Photos need to be uploaded to Amazon photos or the device needs to be connected to other photo apps such as one drive photos to look for family photos/videos that have a special meaning.

**Description:** This activity consists of viewing meaningful photos/videos of them/their family in the past on the screen. For instance, old photos of their relatives.

And then using open-ended questions about the people or events in the photo such as:

*How were you feeling in that picture?*

*Tell me about your brother.*

*What are some of your favourite childhood stories?*

*Tell me more about this picture.*

The answers in this activity are less important than the conversation and engagement.

During the conversation, you can both share your memories and feelings about the pictures. Answer some of the same questions you're asking the person with dementia. Connect, don't correct. This is more about making a connection and sharing memories. Focus on connecting with the person, not correcting them. Take the time to frequently revisit memories using the photos. This activity can be performed by either 1) remotely; using the amazon echo show device and the person has physical access to the photo album, 2) remotely; using any video calling software which allows for screen sharing so they can both look at the photos at the same time, 3) in person using the amazon echo show device ; the caregiver and the person with dementia are both present in the same room and are using the device to access photos on the photo album of the device.

**How to perform the activity:**

You can start the activity with conversations about the past and then you can introduce a topic or item to look at or address.

Such as.:

*What do you think this photo shows?*

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*When do you think that took place?*

*Does it remind you of anything?*

Don't forget that we are not looking for an elaborated response. Just encourage them to describe how they feel about seeing the photos/videos.

Engaging in the conversation is a good start and helps the person feel important and valued by you, and also helps with a sense of being loved and belonging.

**Tips and recommendations:** Do not rush, let them take their time while gently leading the conversation. If speaking is significantly impaired, you can rely more on photos/videos and stimulate the person to react through gestures to simple questions. Mix the photos up. Don't discuss the same set of photos every day. To keep it fresh and interesting, use photos with showing different people and events each time.

### **Personalise the activity:**

You may talk about the person's childhood and earlier holidays. For scheduling the activity, do what works best for the individual. It may be daily or weekly, depending on the person. Find the most comfortable pace and follow the individual's interest level.



**➤ Tips to Personalize the Activity**

You may talk about the person's childhood and earlier holidays. If speaking is significantly impaired, you can rely more on photos/videos and stimulate the person to react through gestures to simple questions..



[Link to the activity video](#)

### 3.3 Hand movements

**Type:** Physical

**Mode of implementation:** Remote.

**Goal/Benefits:** Training different hand movements can improve dexterity, concentration, coordination and memory.

**Time:** 10-20 mins.

**Prerequisites:** In order to perform the activity remotely with a digital device, make sure the following prerequisites are met:

1. Both devices are connected through the drop-in function or a video call, in case you opt for another digital device.
2. The person can see and hear you properly through the screen.
3. The person is relaxed and motivated to engage with the activity.

**Description:** This activity is done by showing small hand movements to the person with dementia so they can repeat them. The caregiver can have the role of the instructor for the person with dementia, showing the exercises on the camera.

**How to perform the activity:** You could start the exercise by explaining the many benefits of training hand movements.

Instructions: Make sure your hands are visible on the screen of the other person.

Then go on to try the following four exercises.

**Exercise 1:** This exercise is useful for warming up your hands before moving on to more intricate dexterity exercises.

First you make a relaxed fist with both hands and bring them up in front of you. Next you stretch your fingers right out as far as they will go. Then bring your fingers back into the relaxed fist position again.

Repeat the exercise 10 times.

**Exercise 2:** Bring your hands in front of you in prayer position with palms and fingers touching and the fingers being spread out. Then, pull your palms apart, lift your elbows, so you have just got your fingertips touching. Next, bring your elbows back down and your palms and fingers touching again with your fingers spread out.

Repeat the exercise 10 times.

**Exercise 3:** Bring both hands up in front of you. Touch your index fingers to your thumbs, then change and touch your middle fingers to your thumbs, then your ring fingers to your thumbs and then your little finger. Then back: first your ring fingers, then your middle fingers and finally, touch your index fingers to your thumbs.

Repeat 10 times.

To make the exercise more challenging you can increase the pace.



## MODULE 2 | Remote and Digital Stimulating **Activities** for Dementia Patients


Exercise 4: Bring both hands in front of you in a relaxed fist position facing towards yourself. Extend the thumb on your right hand and extend the little finger on your left hand. Then swop over so that on your right hand you have got your little finger extended and on your left hand you have got your thumb extended. Try to do it at the same time.

Swop back and repeat 10 times.

You will probably find this very difficult the first few times as your brain has to work really hard because you are asking both of your hands to do something different at the same time.

**Tips and recommendations:** Adjust the difficulty of the exercises according to the level of impairment.

**Personalise the activity:** You can ask them to repeat small hand movements that they used to do in their daily lives. For instance, *how do we put salt in the food?* or *how did you use to fish?* Depending on their previous hobbies and/or daily lives you can find hand movements which were more meaningful for them. You can show them this kind of movements and ask them to repeat them with you.



**Prerequisites**

**TOP TIPS**

If the person has vision and/or hearing problems, make sure they have their glasses or hearing aids at hand.

If you use Amazon Echo Show, in advance, make sure that:

- volume is correctly set
- 

Hand movements

[Link to the activity video](#)

### 3.4 Relaxing sounds/music

**Type:** Sensorial

**Mode of implementation:** Remote.

**Goal/Benefits:** Stimulate the senses, calm, provide entertainment and relieve boredom, promote interaction and communication.

**Time:** Passive activity. Up to the caregiver.

**Prerequisites:** In order to perform the activity remotely with a digital device, make sure the following prerequisites are met:

1. Your device (eg. Smartphone) is paired with the Amazon Echo show of your loved one. In case you opt for another device, make sure playing sounds remotely is available.
2. Your device is linked to a music service such as: Amazon Music, Apple Music, Deezer, iHeartRadio, Pandora, SiriusXM, Spotify, Tidal, TuneIn, Vevo, and Global Player.
3. Stable and fast internet connection.

**Description:** Relaxing Sounds and Music is a sensorial activity designed for people with late dementia to stimulate the senses, calm, provide entertainment and relieve boredom while promoting interaction and communication. This is a passive activity that can provide valuable sensory stimulation for dementia patients, especially for those confined to bed. Listening to relaxing sounds brings peace and contentment. Many sounds, such as that of a water fountain, birds, and even the sound of children at play can be soothing to individuals with dementia. The activity consists of choosing and playing relaxing sounds and/or music remotely in the background on the device of the person with dementia. **Sounds can be:**

Natural sounds; a gentle rain, or the wind blowing through pine trees, ocean waves, waterfalls, bird songs. There are many recordings of natural sounds available; recordings of ocean waves, waterfalls etc. These recordings of ambient sounds are also very good sleep and relaxation aids. Sound does not have to be pleasing or melodic to be effective. Even “white noise” has been shown to improve memory in Alzheimer’s patients.

Music can be: Reminiscence music or classical music. Familiar music is stimulating on several levels and is a strong and important component of a comprehensive reminiscence therapy routine. The music that the dementia patient used to enjoy when he or she was younger is best to stimulate reminiscence. Classical music has shown to have positive effects on dementia patients.

**How to perform the activity:** After pairing up the devices and making sure a music streaming service is linked to the Alexa app:

Open the music-streaming app and select the Echo as the destination to start playing.

Choose the sounds/music you want to play.

Adapt the type of sounds and music according to their taste. For instance, you may know that your loved one used to enjoy spending time near the sea instead of walking around in a forest. You can choose to play sounds that simulate that environment. This is also the case for music, for instance some songs may evoke depressing memories while others may be connected to positive memories.

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**Tips and recommendations:** While setting up the device for the person you care for, make sure the volume is correctly set and the device is paired with your mobile phone, as well as that the drop-in function and permissions are correctly set up in case you want to check up on them. Since this is a passive activity, the duration/frequency and type of sound/music are all chosen by you. However, you may want to monitor and note their reactions over time so you can better adjust the playlists. Pick music according to their taste. If you have to pick for them, choose popular music during their teen years. Music needs to be loud enough to hear but not so loud that it overwhelms them. Pick music that is lower in pitch and has a good strong beat. Make sure the music is clear. Listening to music triggers memories and emotions so you can try to pair them with photographs later when you drop in.

### Personalise the activity:

1. Adapt the times that the music is playing according to their routines and schedule. For instance, sleep problems are highly prevalent in elderly persons with dementia. Poor sleep constitutes a major problem as it causes distress and may aggravate the dementia symptoms. If the person with dementia is experiencing sleep problems you may want to try playing some music during bedtime as a potential sleep aid.
2. Adapt the type of sounds and music according to their mood. You can check on how they are doing using before and after the sounds/music using the drop in function.
3. Duration of the activity. The device can play sounds and music in the background 24/7. You should adjust the duration according to the person's needs.
4. The device location is critical when performing this activity. For instance, If the person has limited physical mobility or is living in a care centre, place the amazon echo show next to them. If the person is still living in their home and can move, you can place the device where you believe is most useful for or you can add as many devices as you like at different areas of the house. These devices can be also used as an intercom system.



[Link to the activity video](#)

## CHAPTER 4. Important clarifications

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### 4.1 Other digital devices and country's availability. Important warnings.

The use of Echo Show device and Alexa's virtual assistant has been selected by the project consortium for training and informative purposes, with information about them included in some of the project training materials. Digital and training content developed by the project consortium was tested and piloted on Echo Show devices, however, this does not represent any obligation for the users to use Amazon Echo Show while following the steps provided by this manual or by any other InfoCARE's training material.

This warning is our attempt to draw readers attention towards the fact that other devices exist and can be used for the same purposes. As stated, training contents provided in InfoCARE manuals have been elaborated by using Amazon Echo Show and Alexa's virtual assistant due to their availability and useful functionalities for dementia caregiving and stimulation, as well as for the project's actuality and to clarify target groups for the sake of enabling the optimised flow of information and support.

However, before following the instructions provided in this manual, you can check your country's availability through personal assistance devices and select the most convenient according to your preferences. Also, you can easily use general virtual assistant applications available in nearly most countries such as Google Assistant and Google Nest Hub (supported by all android devices). Another alternative for virtual assistants can be SIRI, provided by all apple devices. Lastly, Microsoft Personal Digital Assistant and Cortana can be good examples for Microsoft users. Moreover, there are some local digital assistant providers in every country, for further information you can search in your national language for the assistance programs provided by your country.

As for Alexa's virtual assistant, Alexa Voice Service (AVS) International offers language and region-specific services, so you can speak to Alexa and receive responses and content in your preferred language and region. Alexa-supported languages and regions include:

USA, UK, Ireland, Canada, Germany, Austria, India, Japan, Australia, New Zealand, France, Italy, Spain, Mexico, Brazil, the Kingdom of Saudi Arabia, and the United Arab Emirates. Alexa can also interact with customers in US-English, UK-English, CA-English, English with an Australian or Indian accent, German, Japanese, CA-French, FR-French, Italian, ES-Spanish, MX-Spanish, US-Spanish, IN-Hindi, BR-Portuguese, and SA-Arabic.

Moreover, a list of Amazon Supported languages are;

- Chinese (Simplified)      Chinese (Traditional)      English
- French                      German                              Italian
- Japanese                    Korean                              Portuguese (Brazilian)
- Spanish

### 4.2 Ethical Considerations

Amazon Alexa's drop in feature acts like an intercom system. It allows you to use your phone or Alexa-enabled device to "drop in" on another Alexa-enabled device. The device that is being dropped in on will ring for a few seconds. It will then show a green light, for as long as the drop in occurs. When the drop in ends the device that was dropped in on will make a final chime, indicating the "call" is over. The sounds and lights alerting anyone around the device that a drop in has started (or is underway), cannot be shut off or disabled. However, these alerts/signs may go unnoticed.

It is important to **respect the privacy and intimacy of the person with dementia**. If the person is at the early-mid stage of dementia and their memory functions are not significantly damaged, the caregiver can agree on a specific schedule to make the calls required for the activities, so the person is informed in advance instead of using the drop-in function.

## References

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Alzheimer Association, last visit 31/3/2023 <https://www.alz.org/help-support/caregiving/daily-care/activities>

D'Cunha NM, Isbel S, McKune AJ, *et al* Activities outside of the care setting for people with dementia: a systematic review *BMJ Open* 2020;**10**:e040753. doi: 10.1136/bmjopen-2020-040753

Lee-Cheong S, Amanullah S, Jardine M. New assistive technologies in dementia and mild cognitive impairment care: A PubMed review. *Asian J Psychiatr.* 2022 Jul;**73**:103135. doi: 10.1016/j.ajp.2022.

Luscombe N, Morgan-Trimmer S, Savage S, Allan L. Digital technologies to support people living with dementia in the care home setting to engage in meaningful occupations: protocol for a scoping review. *Syst Rev.* 2021 Jun 21;**10**(1):179. doi: 10.1186/s13643-021-01715-4.

Meyer C, O'Keefe F. Non-pharmacological interventions for people with dementia: A review of reviews. *Dementia (London).* 2020 Aug;**19**(6):1927-1954. doi: 10.1177/1471301218813234.

van der Steen JT, Smaling HJ, van der Wouden JC, Bruinsma MS, Scholten RJ, Vink AC. Music-based therapeutic interventions for people with dementia. *Cochrane Database Syst Rev.* 2018 Jul 23;**7**(7):CD003477. doi: 10.1002/14651858.CD003477.