



# **LIFE**

*Listen. Innovate. Field-test. Evaluate.*

***End experiment  
Example Topic list and instruments of  
questionnaire***

The LIFE methodology has been developed during the ACCRA project by the ACCRA consortium. Please refer to the project’s website, [www.accra-project.org](http://www.accra-project.org), if you use any of the materials.



This topic list and questionnaire was developed for the ACCRA project. It is tailored to the robots and use cases of this project. Be aware that the complete survey contains validated instruments of which we do not hold the copyright. Therefore, we only refer to the name of the instrument.

**Contents**

***Topic list interview elderly T0..... 3***

***Topic list interview elderly T1..... 7***

***Topic list interview formal caregiver T0..... 12***

***Topic list interview formal caregiver T1..... 16***

***Topic list interview informal caregiver T0..... 20***

***Topic list interview informal caregiver T1..... 24***

## Topic list interview elderly T0

### Opening

Hello, my name is XX. You will be having this robot, BUDDY, in your house for the coming few weeks. I would like to ask you some questions about your first impression and expectations. I also have a questionnaire on several topics that are important for our research. I will alternate between this questionnaire and open questions.

I have given you a form for you to sign that you know about the reason for this interview. You have signed this, meaning you agreed to be part of our study. I told you that I would make an audio recording of this interview and that we would use the data anonymized. That means that we do not store your name on the recording, but just a number/nickname. Your number/nickname is XXX.

### Demographics

First I have some general questions about you

- a. Are you male or female?
  - Male
  - Female
  
- b. What is your date of birth?
  - dd/mm/yyyy
  
- c. What is your highest level of education?
  - Fewer than 6 years of primary school
  - 6 years of primary school or special education
  - Primary school without further completed education
  - Vocational school
  - Secondary professional education
  - University entrance level
  - University / tertiary education
  
- d. What is your living situation?
  - Independent living
  - Nursing home
  
- e. What is your marital status?
  - Married
  - Widowed
  - Living together
  - Single
  
- f. Do you use any of the following devices?
  - Computer
  - Tablet (such as iPad)
  - Smart phone (such as iPhone)
  - Smartwatch
  - eHEALTH application

g. For which problem are you treated here? .....

## Appearance

Have you ever seen a robot like this?

This is your first impression: what do you think of how this robot looks? What do you like about it and what not? The name of this robot is BUDDY. What do you think of that name?

(size, colour, robustness, shape of head and body, feeling of the handle, boy or girl)

>> Questionnaire question 2

## Godspeed questionnaire series

### Feature by feature

#### Keeping you company

BUDDY will keep you company for the coming weeks. What do you think of that? Would you like having him/her around? You can play games with him and ask for a joke or music, for example. Would you like that?

#### Giving reminders

BUDDY can be programmed by caregivers and family members that it reminds you of things you have to do during the day. What do you think of that? Would that be valuable for you? [Or: do you already have experience with that? Tell me about how it went]

#### Communication

You can call someone with BUDDY and someone can also call you. Don't worry, only people we add to your account are able to call. For example, XX, your family member and the researcher. Did you see that that the robot has a camera so that if necessary the one calling you can see what you are doing. How do you like these features?

(feeling of safety vs feeling of being watched, having contact with other people)

#### Exercises

BUDDY can show you videos for exercising. What do you think of that? Did you already try it? What were your first impressions when doing an exercise? Do you think you will use it?

(motivation to exercise, fun)



## Overall

All in all, and from what you have seen so far, what do you expect can be the value of this robot for your daily life?

Do you also think that having this robot in your house would be of value to others than yourself? For example your family? In what way?

Do you have any concerns about using robots like these in your home?

(‘cold’ vs ‘warm’ care, loneliness, dependency on technology, high cost)

## **Usability**

You have been given some instructions now about how to use the robot. How did that go? What did you find easy and what did you find difficult? Do you think you can manage?

I also have a lot of questions in the questionnaire about the usefulness and ease of use of the robot. Can you give a score and elaborate on your answer?

## **System usability scale (SUS)**

## **Unified Theory of Acceptance and Use of Technology questionnaire (UTAUT)**

## **User experience questionnaire (UEQ)**

## **Quality of life**

Another topic of the interview and the questionnaire is the things that are important in your life and how you are currently feeling and managing your daily life.

You might know that in healthcare we do not only care about making people better so they live longer, but also to improve their quality of life.

Please share with me three aspects that are very important for how you experience quality of life at this moment. It can be aspects that hinder quality of life or aspects that improve it.

[Check also if people have feelings of loneliness or boredom](#)

## **EQ-6D**

## **ICECAP**

## Loneliness

Do you feel lonely sometimes? What makes you feel lonely? What do you do when you feel lonely? Do you feel BUDDY can make you less lonely, and if so how?

## Loneliness Scale De Jong Gierveld

## Self-reliance

A final topic of the interview and questionnaire is how well you can take care of yourself now. I will ask you a few questions about that. Can you tell me how you experience how you can take care of yourself. Do you think if working with BUDDY will help in taking better care of yourself in any way? And if so: how?

>> *Questionnaire question 9, 10*

## Activities of Daily Living (ADL) (Katz, Lawton & Brody)

## AGGIR

## Closing

Do you have anything else you want to tell about BUDDY?

Have you been given good explanations how the robot should be used? is anything unclear? (answer questions that you can answer or write them down and promise that [name] will provide an answer as soon as possible).

Thank you for participating in his experiment. We hope that you will use the robot a lot and that you will let [fill in name] know if things are unclear, if you have a technical problem, or need help in another way. I or my colleague will have an interview with you again at the end of the test, so in three weeks.



## Topic list interview elderly T1

### Opening

Hello, my name is XX. How are you? BUDDY has been in your house for almost 3 weeks now. I would like to ask you again some questions, but now about your experiences and how you think we can improve BUDDY. I also have again a questionnaire on several topics that are important for our research. I will alternate between this questionnaire and open questions.

### Demographics

First I have some general questions about you to check if there are any changes.

- a. Are you male or female?
  - Male
  - Female
  
- b. What is your date of birth? dd/mm/yyyy
  
- c. What is your highest level of education?
  - Fewer than 6 years of primary school 6 years
  - Primary school or special education
  - Primary school without further completed education
  - Vocational school
  - Secondary professional education
  - University entrance level
  - University / tertiary education
  
- d. What is your living situation
  - Independent living
  - Nursing home
  
- e. What is your marital status?
  - Married
  - Widowed
  - Living together
  - Single
  
- f. Do you use any of the following devices?
  - Computer
  - Tablet (such as iPad)
  - Smart phone (such as Iphone)
  - Smartwatch
  - eHEALTH application
  
- g. For which problem are you treated here? .....

## Appearance

You now know BUDDY better than I do. Do you remember what you said when you first saw BUDDY and we talked about it? I know: [fill in with T0]

How do you feel now? What do you like about it and what not? Did this change in the course of time (if so what, why and how)?

You said that BUDDY looked like a [boy, girl, pet, toy]. Do you still see BUDDY like that? Or did it change? How and why? What do you think now of the name BUDDY? [maybe they have given another name]

What should we change about BUDDY's appearance?

(size, colour, robustness, shape of head and body)

## Godspeed questionnaire series

### General use and usability

Where was BUDDY during the day and during the night? Did you use him/her at specific times of the day?

Did you let BUDDY wander around or did you ask it to stay still in a fixed spot?

Did BUDDY understand you every time? If not, what happened? How did you solve it?

BUDDY responds to sound but you can also give manual instructions. Which did you use and why?

Did you have any visitors in the past weeks? How did they react to BUDDY? How did that make you feel?

Were there any technical issues or times when you needed instruction about using BUDDY? How did that go?

What did you find easy and what did you find difficult? Did you manage using BUDDY? Are there things we should improve, and if so how?



I also have a lot of questions in the questionnaire about the usefulness and ease of use of the robot. Can you give a score and elaborate on your answer?

## System usability scale (SUS)

## Unified Theory of Acceptance and Use of Technology questionnaire (UTAUT)

## User experience questionnaire (UEQ)

### Feature by feature

Which features of BUDDY have you used in the past weeks? Which one did you like most?

We will now go through each feature.

#### Keeping you company

BUDDY has kept you company in the last weeks. How did you like having him/her around?

Did you play games with him and ask for a joke or music? Did you like it? Which games did you play?

Did BUDDY dance for you? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]

What could be improved about this feature to make BUDDY a better companion for you?

#### Giving reminders

BUDDY can give reminders. Did you use that feature? What kind of reminders did you set? How did you like this feature? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]

What could be improved about this feature?

#### Communication

You can call someone with BUDDY and someone can also call you. And people can send you photos. Who from your network had the BUDDY app on their phone to communicate with you? Did you use that feature? What was your experience? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]



Is this a valuable feature for you?

What could be improved about this feature?

### Exercises

BUDDY can show you videos for exercising. What do you think of that? Did you already try it? What were your first impressions when doing an exercise? Do you think you will use it?

[if not used: find out why. No need, too difficult, did not work]

### Overall

All in all, and from what you have seen so far, what do you expect can be the value of this robot for your daily life? How did BUDDY make you feel?

And have you also experiences that this robot in your house was of value to others than yourself? For example your family? In what way?

In the previous interview, you also had some concerns about robots: X,X [fill in from T0]. Now that you have had some experience with BUDDY, how do you feel about it? Do you have new concerns? And the other way around, are there things that have surprised you in a positive way?

(‘cold’ vs ‘warm’ care, loneliness, dependency on technology, high cost)

### **Quality of life**

As last time, another topic of the interview and the questionnaire is the things that are important in your life and how you are currently feeling and managing your daily life. You might know that in healthcare we do not only care about making people better so they live longer, but also to improve their quality of life.

Last time, you said three things were very important to you: X,X,X. Have any changes occurred on these things in the past weeks? Do these changes have to do with BUDDY?

This might be a difficult question, but you listed some things that make BUDDY valuable for you. What is the effect of that on your life, if you would be able to keep BUDDY?

### **EQ-6D**

## ICECAP

### **Loneliness**

Do you feel lonely sometimes? What makes you feel lonely? What do you do when you feel lonely? Did BUDDY help in feeling you less lonely, and if so how? What should we change about BUDDY to help with loneliness?

### **Loneliness Scale De Jong Gierveld**

### **Self-reliance**

A final topic of the interview and questionnaire is how well you can take care of yourself now. I will ask you a few questions about that. Can you tell me how you experience how you can take care of yourself. Do you think working with BUDDY has helped you in taking better care of yourself in any way? And if so: how?

### **Activities of Daily Living (ADL) (Katz, Lawton & Brody)**

## AGGIR

Do you think having a robot like this at home would be of value for you? Could it support you with taking care of yourself or with the things that were important to you, X, X and X?

### **Satisfaction**

This is an experiment so unfortunately you have to give BUDDY back. But if it were possible, would you like to keep BUDDY?

Would you recommend BUDDY to other people?

### **Closing**

Do you have anything else you want to tell about BUDDY?

Thank you for participating in this experiment. I hope you enjoyed it. We are very thankful that you participated and we wish you all the best.



## Topic list interview formal caregiver T0

### Opening

Hello, my name is XX. You will be lending this robot, BUDDY, to some of your clients in the coming months. I would like to ask you some questions about your first impression and expectations. I also have a questionnaire on several topics that are important for our research. You already received that on paper/by email and filled it in. Here we want to elaborate on some of the topics from that questionnaire. We are very interested in your expectations and current first experience.

I have given you a form for you to sign that you know about the reason for this interview. You have signed this, meaning you agreed to be part of our study. I told you that I would make an audio recording of this interview and that we would use the data anonymized. That means that we do not store your name on the recording, but just a number. Your number is XXX.

### Demographics

First I have some general questions about you

- a. Are you male or female?
  - Male
  - Female
  
- b. What is your date of birth?
  - dd/mm/yyyy
  
- c. What is your highest level of education?
  - Fewer than 6 years of primary school
  - 6 years of primary school or special education
  - Primary school without further completed education
  - Vocational school
  - Secondary professional education
  - University entrance level
  - University / tertiary education
  
- d. What is your marital status?
  - Married
  - Widowed
  - Living together
  - Single
  
- f. Do you use any of the following devices?
  - Computer
  - Tablet (such as iPad)
  - Smart phone (such as Iphone)
  - Smartwatch
  - eHEALTH application
  
- h. What is your profession
  - .....

## **Recruitment and training**

Have you been involved in the recruitment of clients? Can you share with us if that was difficult or easy? What kind of responses did you get when you invited people for this study?

Have you been involved in helping clients use BUDDY? Can you share with us what clients asked you. Was it difficult or easy to help?

## **Appearance**

This is your first impression: what do you think of this robot? what do you like about it and what not? The name of this robot is BUDDY. What do you think of that name?

(size, colour, robustness, shape of head and body, feeling of the handle, boy or girl)

## **Godspeed Questionnaire series**

### **Feature by feature**

#### Keeping you company

BUDDY will keep your clients company for the coming weeks. What do you think of that?

Clients can play games with him and ask for a joke or music, or dance with BUDDY, for example. What would be the value of that for them and for you?

#### Giving reminders

BUDDY can be programmed by caregivers and family members that it reminds the client of things they have to do during the day. What do you think of that feature? What would be the value for them and for you?

#### Communication

You can call a client with BUDDY and the client can also call you. Did you see that that the robot has a camera so that if necessary you can see what the client is doing. How do you like these features? What would be the value for them and for you?

(feeling of safety vs feeling of being watched)

#### Exercises



BUDDY can show videos for exercising to clients. What do you think of that? What would be the value for the client and for you?

### Overall value

All in all, and from what you have seen so far, what do you expect can be the value of this robot for your clients, the informal caregivers and yourself?

Do you have any concerns about using robots like these in [the care facility]?

(‘cold’ vs ‘warm’ care, dependency on technology, high cost, losing job)

### **Usability**

You have been given some instructions now about how to use the robot. How did that go? Do you think you can manage, also when the clients have problems with BUDDY?

What do you think about the user friendliness from the perspective of the client. Do you think they can manage?

### **System usability scale (SUS)**

### **Unified Theory of Acceptance and Use of Technology questionnaire (UTAUT)**

### **User experience questionnaire (UEQ)**

### **Job satisfaction**

It is assumed that robotics will support caregivers in their work, and enhance their satisfaction. How do you think BUDDY can support you in your work? Do you think BUDDY will have an impact on your satisfaction? Do you on the other hand think BUDDY will have a negative impact on your work and satisfaction?

### **Job Satisfaction Scale**

### **Closing**

Do you have anything else you want to tell about BUDDY?

Have you been given good explanations how the robot should be used? is anything unclear? (answer questions that you can answer or write them down and promise that [name] will provide an answer as soon as possible).



Thank you for participating in this experiment. We hope that you will encourage the clients to use BUDDY a lot and that you will let us know if things are unclear, if you or your clients face technical problems that they cannot solve, or when you need help in another way. I or my colleague will have an interview with you again in a month and near the end of the experimentation period. [timing depends on experimentation planning]



## Topic list interview formal caregiver T1

### Opening

Hello, my name is XX. How are you? You have been contributing to this experimentation. I would like to ask you some questions about your experiences and your impression of the impact this robot had on your clients. I also have the questionnaire again on several topics that are important for our research, that I would like you to fill in today. Here we want to elaborate on some of the topics from that questionnaire. We are very interested in your current experience.

### Demographics

First I have some general questions about you

- a. Are you male or female?
  - Male
  - Female
  
- b. What is your date of birth?
  - dd/mm/yyyy
  
- c. What is your highest level of education?
  - Fewer than 6 years of primary school 6 years
  - Primary school or special education
  - Primary school without further completed education
  - Vocational school
  - Secondary professional education
  - University entrance level
  - University / tertiary education
  
- d. What is your marital status?
  - Married
  - Widowed
  - Living together
  - Single
  
- f. Do you use any of the following devices?
  - Computer
  - Tablet (such as iPad)
  - Smart phone (such as Iphone)
  - Smartwatch
  - eHEALTH application
  
- h. What is your profession
  - .....



## Appearance

You now know BUDDY a bit better. What do you think now of how this robot looks? What do you like about it and what not? Did this change in the course of time (if so what, why and how)? What do you think now of the name BUDDY? What should we change about BUDDY's appearance?

(size, colour, robustness, shape of head and body, having arms)

## Godspeed Questionnaire series

### General use and usability

Have you been involved in helping clients use BUDDY? Can you share with us what clients asked you. Was it difficult or easy to help?

Did you motivate clients to use BUDDY? How, and what was the effect?

I also have a lot of questions in the questionnaire about the usefulness and ease of use of the robot. Can you give a score and elaborate on your answer?

Did you have any contact with family members in the experiment? How did they react to BUDDY?

\*If they used BUDDY themselves or the communication app:

Did BUDDY understand you every time? If not, what happened? How did you solve it?

BUDDY responds to sound but you can also give manual instructions. Which did you use and why?

Were there any technical issues or times when you needed instruction about using BUDDY? How did that go?

What did you find easy and what did you find difficult? Did you manage using BUDDY and helping the client? Are there things we should improve, and if so how?

## System usability scale (SUS)

## Unified Theory of Acceptance and Use of Technology questionnaire (UTAUT)

## User experience questionnaire (UEQ)

### Feature by feature

Which features of BUDDY have been used most, is your impression? Which one did you personally like most?

We will now go through each feature.



### Keeping clients company

BUDDY has kept clients company in the last weeks. How did they like having him/her around?

What were the positive things and what were the negative ones?

What could be improved about this feature to make BUDDY a better companion for your clients?

### Giving reminders

BUDDY can give reminders. Did you use that feature for your clients? What kind of reminders did you set? How did you like this feature? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]

What could be improved about this feature?

### Communication

You can call a client with BUDDY and the client can also call you. Did you use that feature? What was your experience? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]

Is this a valuable feature for you? How did it support your work?

What could be improved about this feature?

### Exercises

BUDDY can show a client some videos for exercising. What do you think of that? Did you already try it with your clients?

[if not used: find out why. No need, too difficult, did not work]

Is this a valuable feature for you? How did/can it support your work?

What could be improved about this feature?

### Overall



All in all, and from what you have seen so far with your clients, what is the value of this robot for their daily life? And for the informal caregiver?

In the previous interview, you also had some concerns about robots: X,X [fill in from T0]. Now that you have had some experience with BUDDY, how do you feel about it? Do you have new concerns? And the other way around, are there things that have surprised you in a positive way?

(‘cold’ vs ‘warm’ care, loneliness, dependency on technology, high cost)

### **Job satisfaction**

As said in the other interview(s), it is assumed that robotics will support caregivers in their work, and enhance their satisfaction. How do you feel about that now? Did BUDDY support you in your work in any way? Please explain. Does BUDDY have an impact on your satisfaction? Do you on the other hand find BUDDY to have a negative impact on your work and satisfaction?

### **Job Satisfaction Scale**

#### **Closing**

Do you have anything else you want to tell about BUDDY?

Please let [name] know if you have a technical problem, or need help in another way. I or my colleague will have an interview with you again towards the end of the experiment.

Thank you for participating in this experiment. I hope you enjoy(ed) it. We are very thankful that you participated (and we wish you all the best).

## Topic list interview informal caregiver T0

### Opening

Hello, my name is XX. Your loved one will be using this robot, BUDDY, in the coming weeks. I would like to ask you some questions about your first impression and expectations. I also have a questionnaire on several topics that are important for our research, that I would like you to fill in today with me. I will alternate between this questionnaire and open questions.

I have given you a form for you to sign that you know about the reason for this interview. You have signed this, meaning you agreed to be part of our study. I told you that I would make an audio recording of this interview and that we would use the data anonymized. That means that we do not store your name on the recording, but just a number/nickname. Your number/nickname is XXX.

### Demographics

First I have some general questions about you

- a. Are you male or female?
  - Male
  - Female
  
- b. What is your date of birth?
  - dd/mm/yyyy
  
- c. What is your highest level of education?
  - Fewer than 6 years of primary school
  - 6 years of primary school or special education
  - Primary school without further completed education
  - Vocational school
  - Secondary professional education
  - University entrance level
  - University / tertiary education
  
- d. What is your living situation?
  - Independent living
  - Nursing home
  
- e. What is your marital status?
  - Married
  - Widowed
  - Living together
  - Single
  
- f. Do you use any of the following devices?
  - Computer
  - Tablet (such as iPad)
  - Smart phone (such as iPhone)
  - Smartwatch
  - eHEALTH application

- g. For which problem are you treated here? .....
- h. What is your profession .....
- i. What is your relation with the elder
  - Partner
  - Child
  - Son or daughter in law
  - Sister or brother
  - Niece or nephew
  - Uncle or Aunt
  - Friend
  - Volunteer
  - Other:.....

### Appearance

Did you already see the robot? [\[if not: show picture\]](#)

This is your first impression: what do you think of how this robot looks? What do you like about it and what not? The name of this robot is ASTRO. What do you think of that name?

[\(size, colour, robustness, shape of head and body, feeling of the handle\)](#)

### Godspeed questionnaire series

#### Feature by feature

##### Keeping your loved one company

BUDDY will keep your loved one company for the coming weeks. What do you think of that?

He/she can play games with it and ask for a joke or music, or dance with BUDDY, for example. What would be the value of that for your loved one? What would be the value for you?

##### Giving reminders

BUDDY can be programmed by caregivers and family members that it reminds the client of things they have to do during the day. What do you think of that feature? What would be the value for your loved one and for you?

##### Communication



You can call your loved one with the BUDDY app and your loved one can call you. Did you see that that the robot has a camera so you will see each other like on skype. How do you like these features? What would be the value for your loved one and for you?

(feeling of safety vs feeling of being watched)

#### Exercises

BUDDY can show videos for exercising to your loved one. What do you think of that? What would be the value for him/her and for you?

#### Overall value

All in all, and from what you have seen so far, what do you expect can be the value of this robot for your loved one and yourself?

Do you have any concerns about using robots like these in the homes of older people in general or your loved one in specific?

(‘cold’ vs ‘warm’ care, dependency on technology, high cost, losing job)

#### **Usability**

You have been given some instructions now about how to use the robot. Do you think your loved one can manage? What did you think will be easy and what will be difficult?

#### **System usability scale (SUS)**

#### **Unified Theory of Acceptance and Use of Technology questionnaire (UTAUT)**

#### **User experience questionnaire (UEQ)**

#### **Subjective burden**

It is assumed that robotics will support informal caregivers, and lessen their burden. How do you think BUDDY can support you in you in your care for your loved one? Do you think BUDDY will have an impact on your burden? Do you on the other hand think BUDDY will have a negative impact on you and your burden?

#### **CarerQol**

#### **Quality of life**

The final topic of the interview and the questionnaire is the things that are important in your life and how you are currently feeling and managing your daily life, caring for your loved one. You might



know that in healthcare we also care about the life of informal caregivers, and want to improve their quality of life.

At the moment your loved one needs support in different aspects of his/her life. How do you feel about that? Does it affect your quality of life in any way?

### Cantril's self-anchoring ladder

#### **Closing**

Do you have anything else you want to tell about BUDDY?

The coming weeks your loved one will be using the BUDDY robot. We are very interested in his/her but also your experience. I or my colleague will have an interview with your loved one again. But we would also like to talk to you again at the time at the end of the test, right before BUDDY will go to another home.

**Topic list interview informal caregiver T1**

**Opening**

Hello, my name is XX. How are you? Your loved one has been using this robot, BUDDY, over the last weeks. I would like to ask you some questions about your experiences and your impression of the impact this robot had on your loved one. I also have the questionnaire again on several topics that are important for our research, that I would like you to fill in today with me. I will alternate between this questionnaire and open questions.

**Demographics**

First I have some general questions about you to check if things have changed.

- a. Are you male or female?  Male  
 Female
  
- b. What is your date of birth? dd/mm/yyyy
  
- c. What is your highest level of education?  
 Fewer than 6 years of primary school 6 years  
 Primary school or special education  
 Primary school without further completed education  
 Vocational school  
 Secondary professional education  
 University entrance level  
 University / tertiary education
  
- d. What is your living situation  Independent living  
 Nursing home
  
- e. What is your marital status?  Married  
 Widowed  
 Living together  
 Single
  
- f. Do you use any of the following devices?  Computer  
 Tablet (such as iPad)  
 Smart phone (such as Iphone)  
 Smartwatch  
 eHEALTH application
  
- g. For which problem are you treated here? .....
  
- h. What is your profession .....
  
- i. What is your relation with the elder  Partner



- Child
- Son or daughter in law
- Sister or brother
- Niece or nephew
- Uncle or Aunt
- Friend
- Volunteer
- Other:.....

## Appearance

You now know BUDDY a bit better. What do you think now of how this robot looks? What do you like about it and what not? Did this change in the course of time (if so what, why and how)? What do you think now of the name BUDDY? What should we change about BUDDY's appearance?

(size, colour, robustness, shape of head and body, feeling of the handle)

## Godspeed questionnaire series

### General use and usability

How many times did you interact with BUDDY?

Did your loved one need help to use BUDDY? Did you help?

Did your loved one need motivation to use BUDDY? What did you do?

*If you have the experience:*

Did BUDDY understand you every time? If not, what happened? How did you solve it?

BUDDY responds to sound but you can also give manual instructions. Which did you use and why?

Were there any technical issues or times when you needed instruction about using BUDDY? How did that go?

What did you find easy and what did you find difficult? Did you manage using BUDDY and helping the client? Are there things we should improve, and if so how?

I also have a lot of questions in the questionnaire about the usefulness and ease of use of the robot. Can you give a score and elaborate on your answer?

## System usability scale (SUS)

## Unified Theory of Acceptance and Use of Technology questionnaire (UTAUT)

## User experience questionnaire (UEQ)



## **Feature by feature**

Which features of BUDDY have been used most, is your impression? Which one did you personally like most?

We will now go through each feature.

### Keeping your loved one company

BUDDY has kept your loved one company in the last weeks. How did they like having him/her around?

What were the positive things and what were the negative ones?

What could be improved about this feature to make BUDDY a better companion for your loved one?

### Giving reminders

BUDDY can give reminders. Did you use that feature? What kind of reminders did you set? How did you like this feature? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]

What could be improved about this feature?

### Communication

You can call your loved one with BUDDY and (s)he can also call you and you can send pictures. Did you use that feature? What was your experience? What are the positive things and what are the negative?

[if not used: find out why. No need, too difficult, did not work]

Is this a valuable feature for you?

What could be improved about this feature?

### Exercises

BUDDY can show your loved one some videos for exercising. Do you know if this was used? What was your experience?

[if not used: find out why. No need, too difficult, did not work]

Is this a valuable feature for you?

What could be improved about this feature?



### Overall value

All in all, and from what you have seen, what is the value of this robot for the daily life of your loved one?

In the previous interview, you also had some concerns about robots: X,X [fill in from T0]. Now that you have had some experience with BUDDY, how do you feel about it? Do you have new concerns? And the other way around, are there things that have surprised you in a positive way?

(‘cold’ vs ‘warm’ care, loneliness, dependency on technology, high cost)

If this robot would be in the market, would you encourage your loved one to buy it? Or would you buy it yourself for him/her?

### **Subjective burden**

As said in the other interview, it is assumed that robotics will support informal caregivers, and lessen their subject. How did BUDDY support you in you in your care for your loved one? Did BUDDY have an impact on your burden? Do you on the other hand found BUDDY to have a negative impact on you and your burden?

### **CarerQol**

### **Quality of life**

The final topic of the interview and the questionnaire is the things that are important in your life and how you are currently feeling and managing your daily life. As we said in the former interview, in healthcare we care about the life of informal caregivers, and improving their quality of life.

If you consider the things BUDDY did for your loved one in the past weeks. How do you feel about that? How does it affect your quality of life in any way?

### **Cantril’s self-anchoring ladder**

### **Closing**

Do you have anything else you want to tell about BUDDY?

Thank you for participating in this experiment. I hope you enjoyed it. We are very thankful that you participated and we wish you all the best.