(Before) Reflecta - Reflecting about values on the End of Life

Many people do not have an advance directive, often because it is difficult to reflect on personal values and preferences regarding end-of-life decisions. Reflecta is an AI-based chatbot designed to support this reflection through structured, value-focused questions without providing medical advice.

Thank you for your interest in participating in this study on the AI-based reflection tool Reflecta. The aim of this study is to explore how such a tool may support individuals in reflecting on personal values and preferences related to end-of-life decisions.

This study is conducted as part of the Bachelor's degree programme in Medical Informatics at the Bern University of Applied Sciences (BFH), within the module *Clinical Studies*.

This survey represents the first (**Before**) questionnaire and is completed prior to using the Reflecta tool. After interacting with Reflecta, you will be asked to complete a second (**After**) questionnaire. Your responses will be collected anonymously and used exclusively for research purposes.

Please note that the survey is online until **April 28th**, and the follow-up must be completed by then.

The data collection is divided into three parts:

1. Before questionnaire (approx. 5')
2. Usage of the Reflecta tool (approx. 10')
3. After questionnaire (approx. 5')

After completing the Before questionnaire, a random code will be generated. This code is required to complete the After questionnaire. Please save it in a secure location.

Participation is entirely voluntary. By proceeding with this survey, you confirm that you are at least 18 years old and consent to the use of your data for this study.

Thank you for your valuable contribution.

There are 13 questions in this survey.

Personal Code

Please store your personal code carefully. This code is required to complete the After questionnaire. Without it, your responses cannot be matched.

We recommend taking a screenshot or copying and pasting the code to ensure it is stored securely.

{if(is_empty(randCode), rand(10000000,99999999), randCode)}

*

Demografic Information

Please enter your age (in years): *

Only an integer value may be entered in this field.
Please write your answer here:

How do you identify your gender?

Please choose **only one** of the following:

- ◯ Female
- ◯ Male

Which of the following best describes your current marital status? *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Single
- ◯ Married
- ◯ In a registered partnership
- ◯ Widowed
- ◯ Divorced
- ◯ None of the above

Advance Directive Context

Do you currently have an advance directive? *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Yes
- ◯ No

Have you ever experienced a life-threatening illness? *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Yes
- ◯ No

A life-threatening illness refers to a serious medical condition that could potentially lead to death, such as cancer, severe heart disease, mental illness, or other critical conditions.

What do you find challenging, difficult, or unclear when reflecting on your personal values and decisions regarding advance directives?

Please write your answer here:

Technology Use

Please select one of the following options *

Please choose the appropriate response for each item:

	Never	Less than once per month	Monthly	Weekly	Several times per week	Daily
How often do you use Artificial Intelligence (AI) tools (e.g., ChatGPT)?	◯	◯	◯	◯	◯	◯

Please indicate to what extent you agree with the following statement *

Please choose the appropriate response for each item:

	1	2	3	4	5
I feel confident when interacting with Artificial Intelligence (AI) systems (e.g., chatbots, ChatGPT).	◯	◯	◯	◯	◯

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Attitudes Toward End-of-Life Decisions

I have already thought about medical decisions at the end of life. *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Yes
- ◯ No

Make a comment on your choice here:

If yes, in which context?

Please indicate to what extent you agree with the following statements *

Please choose the appropriate response for each item:

	1	2	3	4	5
The topic of advance directives is relevant to me.	◯	◯	◯	◯	◯
I know which medical treatments or interventions would be important to me at the end of life.	◯	◯	◯	◯	◯
I do not feel overwhelmed when thinking about end-of-life decisions.	◯	◯	◯	◯	◯
I can imagine creating an advance directive.	◯	◯	◯	◯	◯
I feel sufficiently informed about advance directives.	◯	◯	◯	◯	◯
I feel confident about how to proceed to create an advance directive.	◯	◯	◯	◯	◯

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Trust in AI-Generated Health Advice (TAIGHA)

Trust Items - Please indicate to what extent you agree with the following statements:

*

Please choose the appropriate response for each item:

	1	2	3	4	5
I feel comfortable following the AI's health advice.	◯	◯	◯	◯	◯
The AI provides advice that should lead to better health.	◯	◯	◯	◯	◯
I feel a sense of trust toward the AI's advice.	◯	◯	◯	◯	◯
I feel positive about relying on the AI's advice.	◯	◯	◯	◯	◯
I believe the AI's advice will help me make good health decisions.	◯	◯	◯	◯	◯

In the following statements, Artificial Intelligence (AI) refers to tools such as ChatGPT, Google Gemini, or Microsoft Copilot.

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Distrust Items - Please indicate to what extent you agree with the following statements:

*

Please choose the appropriate response for each item:

	1	2	3	4	5
I feel uncomfortable with the idea of following the AI's advice.	◯	◯	◯	◯	◯
I think following the AI's advice could pose health risks.	◯	◯	◯	◯	◯
I feel distressed about relying on the AI's advice.	◯	◯	◯	◯	◯
I feel tense about taking the AI's advice into account.	◯	◯	◯	◯	◯
The idea of trusting the AI's advice makes me uneasy.	◯	◯	◯	◯	◯

In the following statements, Artificial Intelligence (AI) refers to tools such as ChatGPT, Google Gemini, or Microsoft Copilot.

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Thank you for completing this first (**Before**) questionnaire. We highly appreciate your contribution to this study.

IMPORTANT: Please open the following links in **separate browser tabs**.

Do not close this window; you must return here in 10 minutes to complete the **follow-up questionnaire**. The survey will remain online until **April 28th**, and the follow-up must be submitted by that date.

Your personal code: {randCode}

After-Questionnaire:
https://surveys.bfh.ch/After-Questionnaire-Reflecta-Survey

Reflecta Link:
https://reflecta-frontend-in2q.onrender.com

Your participation is very valuable and helps us better understand the potential of AI-supported reflection tools.

Thank you again for your support.

Submit your survey.
Thank you for completing this survey.

(After) Reflecta - Reflecting about values on the End of Life

Many people do not have an advance directive, often because it is difficult to reflect on personal values and preferences regarding end-of-life decisions. Reflecta is an AI-based chatbot designed to support this reflection through structured, value-focused questions without providing medical advice.

Thank you for your interest in participating in this study on the AI-based reflection tool Reflecta. The aim of this study is to explore how such a tool may support individuals in reflecting on personal values and preferences related to end-of-life decisions.

This study is conducted as part of the Bachelor's degree program in Medical Informatics at the Bern University of Applied Sciences (BFH), within the module *Clinical Studies*.

This survey represents the second (**After**) questionnaire and is completed after interacting with the Reflecta tool. Your responses will be collected anonymously and used exclusively for research purposes.

The data collection is divided into three parts:

1. Before questionnaire (approx. 5')
2. Usage of the Reflecta tool (approx. 10')
3. After questionnaire (approx. 5')

To complete the After questionnaire, the **personalized code** generated after completing the Before questionnaire is required.

Please note that the survey is online until **April 28th**, and the follow-up must be completed by then.

Participation is entirely voluntary. By proceeding with this survey, you confirm that you are at least 18 years old and consent to the use of your data for this study.

Thank you for your valuable contribution.

There are 10 questions in this survey.

Personal Code

Please enter your personalized code which was generated after completing the Before-Questionnaire. *

Please write your answer here:

Preparation for Decision Making

Please indicate your opinion about the effect of the Reflecta tool by circling the appropriate number to show the extent to which you agree with each statement.

Did the Reflecta tool...

*

Please choose the appropriate response for each item:

	1	2	3	4	5
Help you recognize that a decision needs to be made?	◯	◯	◯	◯	◯
Prepare you to make a decision?	◯	◯	◯	◯	◯
Help you think about the pros and cons of each option?	◯	◯	◯	◯	◯
Help you think about which pros and cons are most important?	◯	◯	◯	◯	◯
Help you know that the decision depends on what matters most to you?	◯	◯	◯	◯	◯
Help you organize your own thoughts about the decision?	◯	◯	◯	◯	◯
Help you identify questions you want to ask your doctor?	◯	◯	◯	◯	◯
Prepare you to talk to your doctor about what matters most to you?	◯	◯	◯	◯	◯
Prepare you for a follow-up visit with your doctor?	◯	◯	◯	◯	◯

1 = Not at all | 2 = A little | 3 = Somewhat | 4 = Quite a bit | 5 = A great deal

Chatbot Usability

Please complete these questions by reading each statement carefully and placing a tick in the circle that best matches how you feel about the statement. Remember that there are no right or wrong answers!

*

Please choose the appropriate response for each item:

	1	2	3	4	5
The chatbot's personality was realistic and engaging.	◯	◯	◯	◯	◯
The chatbot seemed too robotic.	◯	◯	◯	◯	◯
The chatbot was welcoming during initial setup.	◯	◯	◯	◯	◯
The chatbot seemed very unfriendly.	◯	◯	◯	◯	◯
The chatbot explained its scope and purpose well.	◯	◯	◯	◯	◯
The chatbot gave no indication as to its purpose.	◯	◯	◯	◯	◯
The chatbot was easy to navigate.	◯	◯	◯	◯	◯
It would be easy to get confused when using the chatbot.	◯	◯	◯	◯	◯
The chatbot understood me well.	◯	◯	◯	◯	◯
The chatbot failed to recognise a lot of my inputs.	◯	◯	◯	◯	◯
Chatbot responses were useful, appropriate, and informative.	◯	◯	◯	◯	◯
Chatbot responses were irrelevant.	◯	◯	◯	◯	◯
The chatbot coped well with any errors or mistakes.	◯	◯	◯	◯	◯
The chatbot seemed unable to handle any errors.	◯	◯	◯	◯	◯
The chatbot was very easy to use.	◯	◯	◯	◯	◯
The chatbot was very complex.	◯	◯	◯	◯	◯

The chatbot in the following statements refers to the Reflecta tool.

1=strongly disagree | 2=disagree | 3=neutral | 4=agree | 5=strongly agree

Attitudes Toward End-of-Life Decisions

I have already thought about medical decisions at the end of life. *

Please choose **only one** of the following:

◯ Yes
◯ No

Make a comment on your choice here:

If yes, in which context?

Please indicate to what extent you agree with the following statements *

Please choose the appropriate response for each item:

	1	2	3	4	5
The topic of advance directives is relevant to me.	◯	◯	◯	◯	◯
I know which medical treatments or interventions would be important to me at the end of life.	◯	◯	◯	◯	◯
I do not feel overwhelmed when thinking about end-of-life decisions.	◯	◯	◯	◯	◯
I can imagine creating an advance directive.	◯	◯	◯	◯	◯
I feel sufficiently informed about advance directives.	◯	◯	◯	◯	◯
I know how to proceed to create an advance directive.	◯	◯	◯	◯	◯

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Trust in AI-Generated Health Advice (TAIGHA)

Trust Items - Please indicate to what extent you agree with the following statements: *

Please choose the appropriate response for each item:

	1	2	3	4	5
I feel comfortable following the AI's health advice.	◯	◯	◯	◯	◯
The AI provides advice that should lead to better health.	◯	◯	◯	◯	◯
I feel a sense of trust toward the AI's advice	◯	◯	◯	◯	◯
I feel positive about relying on the AI's advice.	◯	◯	◯	◯	◯
I believe the AI's advice will help me make good health decisions.	◯	◯	◯	◯	◯

In the following statements, Artificial Intelligence (AI) refers to the Reflecta tool.

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Distrust Items - Please indicate to what extent you agree with the following statements: *

Please choose the appropriate response for each item:

	1	2	3	4	5
I feel uncomfortable with the idea of following the AI's advice.	◯	◯	◯	◯	◯
I think following the AI's advice could pose health risks.	◯	◯	◯	◯	◯
I feel distressed about relying on the AI's advice.	◯	◯	◯	◯	◯
I feel tense about taking the AI's advice into account.	◯	◯	◯	◯	◯
The idea of trusting this AI advice makes me uneasy.	◯	◯	◯	◯	◯

In the following statements, Artificial Intelligence (AI) refers to the Reflecta tool.

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Conclusion

What opportunities and limitations do you see in using an AI-based chatbot like Reflecta to support reflection on end-of-life decisions? *

Please write your answer here:

Willingness to Use *

Please choose the appropriate response for each item:

	1	2	3	4	5
I would use the Reflecta tool again to support the creation of an advance directive.	◯	◯	◯	◯	◯
I would recommend the Reflecta tool to others.	◯	◯	◯	◯	◯

1 = Strongly disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly agree

Has your perspective on advance directives changed after using the chatbot? If yes, how? If no, why not?

*

Please write your answer here:

Thank you for completing this second (**After**) questionnaire. We highly appreciate your contribution to this study.

Your participation is very valuable and helps us better understand the potential of AI-supported reflection tools.

To claim your **well-earned** compensation, use the following URL: https://testingit.me/stgXdYfV/?done=1

Thank you again for your support.

The Reflecta Team

Submit your survey.
Thank you for completing this survey.