

Semi-structured interview guide

Intro: Thank you for your willingness to participate. We really appreciate your insights. I will record this interview so that your thoughts are accurately represented. There are no right or wrong answers and you may stop the recording at any time during the interview. I will also be taking a few notes during the interview. Is it okay if we proceed?

Today, I am hoping to get your feedback on a new AI-driven digital tool prototype, which uses patient data to provide a personalised prediction of outcomes, such functioning and suicidal ideation. This will involve some user testing and then some follow-up questions. The intended use for the tool is in clinical practice, enabling patients to enter data and enabling clinicians to monitor their history and predicted trajectory to inform decision-making. Currently, the tool is built into Innowell.

At this stage, do you have any questions?

User testing: Let's do some user testing now. First, I will share my screen to briefly demonstrate the tool. Then, you will have an opportunity to test it yourself.

Shared screen demo:

1. After logging in, the landing page shows all the patients assigned to this clinician account. I will click through to one of the patients.
2. On the patient dashboard, we can see the domains and data we can monitor based on questionnaires completed by patients.
3. We will click on 'Suicidal Thoughts and Behaviours' as, right now, only predicted trajectories for suicidal ideation are implemented. To make these predictions, the suicidal ideation data collected includes CSSRS, SIDAS, and categorical questions, which the patient would typically enter themselves using questionnaires. Primarily, this page shows the trajectory and predicted trajectory of suicidal ideation, as well as care options going forward. This is the page I would like you to explore yourself.

Any initial thoughts?

Participant testing: I am sending a link and login details to a test account with the Innowell platform. This will give you access to the tool. We have put in some test data, based on real patient data, to provide some patients for you to look at. Let me know when you have logged in.

From here – and there are no right and wrong ways to go about this – I want you to explore the tool with the goal of checking up on a few patients to see how they are progressing regarding their 'Suicidal Thoughts and Behaviours' (Use case) and

interpreting the predictions. Please, think out loud – expressing any impressions including critique – and feel free to ask any questions or explanations during this.

Think aloud prompts:

What do you think you need to do here?

What do you think this means?

What do you think this is showing you?

What was your opinion on that?

How could this be improved?

What did you like/not like about that?

Question topics (bolded), questions (numbered), and prompts (bulleted):

Acceptability

1. *Initial thoughts on the tool?*
2. *Is the tool appropriate?*
3. *Who might be the intended user(s) of the tool?*

Clinical utility

4. *Does the tool fit the intended purpose?*
5. *How might you use the tool?*
6. *When might you use the tool?*
7. *How might a clinician use predictions made by the tool to inform clinical actions?*
 - *What role in clinical decisions should this tool play?*
8. *What outputs are needed from this tool to best support clinicians in making changes to treatment plans?*
 - *What outputs do you want to see from the tool?*
9. *What impact might this tool have on clinical practice, services, and patients?*

Design

10. *What are your preferences regarding the functions of the tool?*
11. *What are your thoughts on the tools:*
 - *Design?*
 - *Aesthetics?*
 - *Usability and function?*
 - *Potential to engage the end-user?*

Clinical workflow and implementation

12. *How could this the tool be integrated into mental health practice?*

- *How can this tool be incorporated into daily clinical work?*

13. *How might the tool be integrated into a mental health service?*

- *What are some barriers?*
- *What are some facilitators?*

14. *How do clinicians share information other clinicians without showing identifiable data?*

- *How could we best incorporate this practice in the tool?*

Ethics and safety

15. *What are some ethical and safety considerations regarding this tool?*

16. *What are your expectations of the trustworthiness and transparency of this tool?*

17. *How are professional codes of conduct and patient privacy implicated in the design and use of this tool?*

DMHTs

18. *Do you currently use any digital tools in your day-to-day practice?*

19. *What experiences do client's have with existing tools for mental health?*

20. *What is good and bad about existing tools in clinical practice that should be incorporated or avoided in this tool?*

21. *What is important in achieving personalised and measurement-based care that should be considered in the design of this tool?*

Next steps

22. *What information is missing in the tool?*

23. *What information do you want to see?*

24. *What does this tool need to be made useful in clinical practice?*

25. *Would the following indicators be helpful for decision-making and how do we display them?*

- *Identifying high risk probability of a patient staying in a poor outcome range.*
- *Identifying and differentiating volatility.*
- *Identifying timeliness of data usefulness.*

26. *What do you think about these indicators?*

27. *How could we display these indicators in the tool?*

28. *What are your thoughts on risk indicators?*

- *Where should risk be featured on the UI?*

29. *What other kinds of modelling tools would be useful?*

30. *What other information do you expect to get from entering data in Innowell?*