

Supplementary B- Guide for Usability Testing

Participant ID -

Interview Date -

Hello,

The purpose of the interview is to have a discussion with you on the Raabta app that we have developed to support pregnant women with high blood pressure disorder. During this interview, I will show you the screens of the Raabta app and walk you through some situations/scenarios to get your opinion/feedback on how the app looks and functions. As we go through the scenarios, I'll ask you some simple questions to understand how you feel about different screens in the app. For example, I might ask you to describe what you're looking at and what the different screens are trying to tell you to do. The goal is to test the app that we have developed for you, not to judge your ability to perform tasks. So please do not worry about making mistakes! The objective is to understand how pregnant women will interact with our Raabta application. The interview will take about an hour and will be audio recorded. Only members of the study team can access our discussion. The members of the team will ensure that you can see your doctor either before or after the interview. Do you have any questions?

Thank you for the time that you will give for this interview.

SCENARIO ONE: COMPLETE BLOOD PRESSURE AND SYMPTOM ASSESSMENT

Step 1: Consider that it is 0900am in the morning and you open the Raabta app. As soon as you open the app, you see the following screen.

- What are your thoughts on this screen?
- What the screen is telling you to do?
- Is the language on this screen clear and easy to read?
- Is the graphics on this screen clear and easy to understand (play button, the picture on the screen)

After looking at this screen, you choose to touch the play button on the top of the screen. After hitting the play button, you hear the following message: *Please use the blood pressure machine provided to take your blood pressure. As you finish taking your blood pressure, the reading will automatically be sent to the Rabata app, and you'll see the recorded blood pressure reading on that screen. If the reading does not appear on the screen automatically due to a problem, or you want help taking a blood pressure reading correctly, you can tick the purple 'Help me take my blood pressure' button. Please call the phone number provided to report that the blood pressure reading is not automatically displayed on the screen.*

- Is the message on the voice clip clear and easy to understand?
- Will you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?



Step 2: Let's pretend you are now taking your blood pressure using the automated Bluetooth enabled blood pressure machine. As soon as you complete taking your blood pressure measurements. You see this screen on the app.

- What are your thoughts for this screen?
- What the screen is telling you to do?
- Is the language on this screen clear and easy to read?

Now, you decide to touch the play button on the top of the screen. After hitting the play button, you hear the following message: *This is your recorded blood pressure. Please touch on the purple button 'next screen' which is at the bottom of the screen, to proceed.*

- Is the message on the voice clip clear and easy to understand?
- Will you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?



Step 3: Let's say that you have completed the blood pressure readings using the provided monitor, and you pushed the next button on the previous screen. As soon as you touch the next button, you see the symptom questionnaire. Let's pretend you have no symptoms. Please walk us through how you would complete this questionnaire.

- What are your thoughts on that activity?
- Is the written language on this screen clear and easy to read?
- Are the graphics on this screen clear and easy to understand?

Now, you decide to touch the play button on the top of the screen. After hitting the play button, you hear the following message: *If you are experiencing any of the symptoms of preeclampsia including headache, blurred vision, severe pain in upper abdomen, bleeding from the lower part of the body (vaginal bleeding), please touch the 'yes' button showing the women experiencing symptoms. If none of these symptoms are present, please touch the 'no' button showing the women without symptoms. After selecting "Yes" or "No", please touch the purple 'Submit' button, which is at the bottom of the screen. If you have any problems answering the question, please call the number provided.*

- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What are your thoughts on the overall symptom assessment task?
- What would you like to see improved?



Step 4: Let's say you have completed blood pressure reading and symptom questionnaire. You clicked on the submit button on the previous screen and now you see this screen.

- What are your first impressions of the screen (green color on the box)?
- What the screen is telling you to do?
- What do you understand from this alert?
- Is the language in the written GREEN alert clear and easy to read?

Now, you decide to touch the play button on the top of the screen. After hitting the play button, you hear the following message: *Based on the blood pressure readings and symptoms listed, you are in good health. Please continue to monitor your blood pressure every day.*



- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?

Step 5: Let's pretend it's another day when you are not feeling well and experiencing blurred vision. Please walk us through how you would take the blood pressure and complete the symptom questionnaire.

After you complete the questionnaire, you see the following result screen.

- What are your first impressions of the screen (red color on the box)?
- What the screen is telling you to do?
- What do you understand from this alert?
- Is the language in the written RED alert clear and easy to read?

Now, you decide to touch the play button on the top of the screen. After hitting the play button, you hear the following message: *Based on your blood pressure readings and symptoms, you should go to the emergency department immediately because your readings are not good.*

- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?

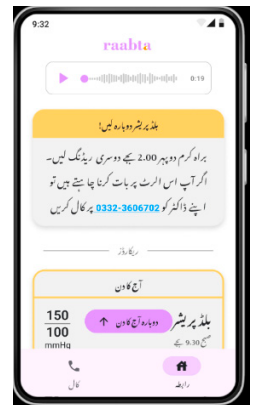


Step 6: Let's say it is Friday and you open the Raabta app at 1000am for measuring your blood pressure and recording your symptoms. You just completed your blood pressure reading and symptom questionnaire. You had no symptoms today, but your blood pressure was high (150/100mmHg). The app gives you following screen.

- What are your first impressions of the screen (yellow color on the box)?
- What the screen is telling you to do?
- What do you understand from this alert?
- Is the language in the written YELLOW alert clear and easy to read?

Now, you decide to touch the play button on the top of the screen. After hitting the play button, you hear the following message: *Based on the blood pressure reading and symptoms, your health is not fine, and you need to get another reading. Please take another reading 4 hours after your last reading. If you want to discuss this alert, call your doctor on the number provided.*

- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?



Step 7: You believed that its now four hours from that high bp reading and its now time to take another reading. Let's pretend that you took another blood pressure reading and complete the symptom questionnaire at 130pm instead of 0200pm. You see this screen.

- What are your first impressions of the screen (grey color on the box)?
- What the screen is telling you to do?
- What do you understand from this alert?
- Is the language in the written GREY alert clear and easy to read?

You touched the play button and hear the following message: *You took the second blood pressure record too soon. Take another reading 4 to 6 hours after the last reading. Please take your blood pressure reading after the time shown and answer the question. A reminder message will be displayed on your screen when it is time for your second reading. If you want to discuss this alert, call your doctor on the number provided.*



- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?

Step 8: Let's pretend that it is now four hours (0200pm) from the first reading and you open the app to take second reading. As soon as you open the app, it gives you this screen. You also receive a reminder call on your phone for the second blood pressure reading.

- What are your first impressions of this reminder alert?
- What the screen is telling you to do?
- What do you understand from this alert?
- Is the language in the alert clear and easy to read?

You touch the play button on the screen and hear this message: *It's time to take your second blood pressure reading and to answer your symptom question. Please use the blood pressure machine provided to take your blood pressure. As you finish taking your blood pressure, the reading will automatically be sent to the Rabata app, and you'll see the recorded blood pressure reading on that screen. If the reading does not appear on the screen automatically due to a problem, or you want help taking a blood pressure reading correctly, you can tick the purple 'Help me take my blood pressure' button. Please call the phone number provided to report that the blood pressure reading is not automatically displayed on the screen.*



- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?

Let's say your blood pressure is still high (150/100mmHg) and you have no symptoms. Please walk us through how you would take the blood pressure and complete the symptom questionnaire.

- What are your first impressions of this reminder alert?
- What the screen is telling you to do?
- What do you understand from this alert?
- Why do you think you have received a red alert this time?
- Is the language in the alert clear and easy to read?

SCENARIO TWO: BLOOD PRESSURE READING NOT GOING THROUGH

Step 1: It is another day of the week, you opened the Raabta app in the morning. Let's say that you just took your blood pressure reading. You are waiting to see the blood pressure reading on the screen. Unfortunately, the reading is not showing up on the app even after a few minutes. Please walk us through what you would do in such situation.

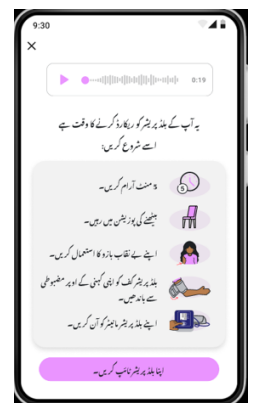
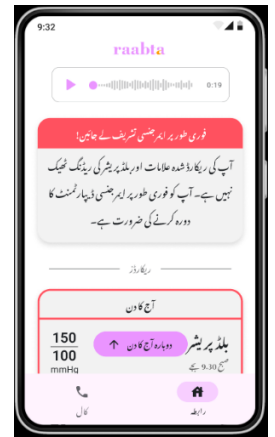
- How do you feel about this situation
- What steps would you take if you encounter such situation?

Step 2: Let's suppose you heard the voice clip on the first screen and that directed you to push "help me take my blood pressure" button. You touched that button and now you see this screen

- What the screen is telling you to do?
- Is the language on the screen clear and easy to understand?
- Are the graphics on this screen clear and easy to understand?

You touch the play button on this screen and hear this message: *Here's how to take blood pressure correctly: First, rest for 5 minutes, then, be in a sitting position, then, use your uncovered arm, then, fasten the blood pressure cuff above your elbow. And finally, turn on your blood pressure machine. If you haven't had your blood pressure taken yet, please take your blood pressure now. If your blood pressure reading is not visible on the screen, touch the purple button at the bottom of the screen to enter your blood pressure readings yourself.*

- Is the message on the voice clip clear and easy to understand?
- Will you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?



Step 3: After reading the instructions and hearing the voice message, you decide to touch 'type in my reading manually' button. You then see this screen. Let's suppose, your blood pressure on the machine is 120/80mmHg. Tell me how would you enter the blood pressure on this screen?

- What are your thoughts for this screen?
- What the screen is telling you to do?
- Is the language on this screen clear and easy to read?
- What do you think about the manual entry of the blood pressures? Would it be easy or difficult?

You touch the play button on this screen and hear this message: *Please enter your blood pressure readings as you see them on the blood pressure monitor. You can use the dial pad to enter blood pressure readings. If you have any problems entering your blood pressure readings, please call the phone number provided. After completing your blood pressure reading, please touch on the purple button 'next screen' which is at the bottom of the screen, to proceed.*

- Is the message on the voice clip clear and easy to understand?
- Will you enjoy using this voice callout feature, or did you find it cumbersome to use?
- What would you like to see improved?



Step 4: After you complete the BP reading, you will this screen.

- What are your thoughts for this screen?
- What the screen is telling you to do?
- Is the written language on this screen clear and easy to read?

You touch the play button on this screen and hear this message: *This is your recorded blood pressure. Please touch on the purple button 'next screen' which is at the bottom of the screen, to proceed.*

- Is the message on the voice clip clear and easy to understand?
- Did you enjoy using this voice callout feature, or did you find it cumbersome to use?



SCENARIO THREE: SEEKING HELP IN MEASURING BLOOD PRESSURE

Step 1: Let's say you have opened Raabta app today and you are not sure how to start. You feel nervous about using the app and measuring your blood pressure. Tell me what would you do in that situation?



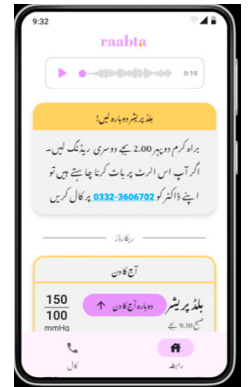
SCENARIO FOUR: CALLING YOUR DOCTOR

Step 1: Let's pretend, you have completed the blood pressure reading and symptom question and then you receive a YELLOW alert. The alert asks you to call your doctor to know more about your condition. You decide to initiate a call to the doctor.

- Please review the screen and let us know how you will call the doctor.
- Is the call icon easy to find?
- What are your first impressions of the call button/icon? Does it look appropriate?
- Is the written language in the call icon clear and easy to read?
- Did you enjoy using this call icon/button, or did you find it cumbersome to use?

You touch the play button on this screen and hear this message: *If you want to talk to a doctor, please touch the phone number or the phone icon.*

- Is the message on the voice clip clear and easy to understand?
- What would you like to see improved?



Step 2: Let's suppose you are at the Raabta home page and having difficulty in measuring blood pressure. You decide you to call to your doctor to seek some help with blood pressure measurement. Please review the screen and let us know how you will call the doctor.



SCENARIO FIVE: LOOKING AT PREVIOUS READINGS

Step 1: Let's say you want to look at the previous blood pressure readings. Currently, you see this screen on your Raabta app. Tell me what would you do in that situation?

- Is it easy to use "Back to Today" button?
- What would you like to see improved?



General Questions:

- What are your overall thoughts about the Raabta app?
- Do you have any additional comments or thoughts regarding the app that was shown today?
- In general, do you have any ideas on how to make this Raabta app better?
- Are there any additional features or tools you think would be helpful to support you during pregnancy?

That's it for my questions, is there anything else you wanted to bring up or discuss? If you have any other information or suggestions you would like to share with us at a later date, please feel free to do so. Thank you for attending this interview!