Welcome to the *Mood Disorder Society of Canada (MDSC) Mental Health Virtual Assistant (Chatbot) Program Pilot!*

Study Title: Mood Disorder Society of Canada (MDSC) Mental Health Virtual Assistant (Chatbot) to Support the Mental Health of Frontline Healthcare Workers

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Study sponsor: Mood Disorders Society of Canada and MITACs are supporting the students and trainees of this study through the MITACs Accelerate Grant.

Invitation to Participate: You are invited to participate in a research study evaluating the usefulness of a chatbot (called "MIRA," the Mental Health Virtual Assistant) designed to help people find information on mental health services and programs. This study is directed to healthcare workers,[1] and their families in the provinces of Alberta and Nova Scotia. Your use of the chatbot is completely anonymous. We do not collect any information that could identify you.

A research study is a way of gathering information on a treatment, procedure or medical device or to answer a question about something that is not well understood. Taking part in this study is voluntary. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for, what risks you might take and what benefits you might receive. This consent form explains

[1] For the purposes of this project, 'healthcare worker" is defined as:

- Any health professionals and any staff member, contract worker, student/trainee, registered volunteer, or other essential caregiver currently working in a healthcare organization, including workers that are not providing direct patient care and are frequently in the patient environment. This includes cleaning staff, food services staff, information technology staff, security, research staff, and other administrative staff.
- Workers providing healthcare service or direct patient service in a congregate, residential or community setting outside of a healthcare organization (e.g., nurse providing patient care in a school, worker performing personal support services in an assisted living facility, medical first responder in the community, peer worker in a shelter).

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the study. You may take as much time as you wish to decide whether or not to participate. Feel free to discuss it with your friends and family, or your family doctor.

How do I participate? If you wish to participate in this study, please click "yes" below and you will be redirected automatically to the chatbot service webpage. The time to use the chatbot will vary for every person, but we estimate using the chatbot should take about 5 to 10 mins depending on what you are looking for. The purpose of the chat bot is to provide users with general information about mental health and about local resources based on their need. The chatbot cannot give you medical advice, does not provide diagnosis or treatment recommendations, and is not a counsellor. The chatbot cannot make referrals. It is an information broker only (only provides information about resources).

We are also hoping you might agree to help provide us with feedback through voluntary surveys. More information about these surveys are below. The surveys take less than 10 minutes to finish.

Why is there a need for this study? The *Mental Health Virtual Assistant is a* state-of-the-art supportive chat bot that uses artificial intelligence and machine learning. The purpose of the chat bot is to provide users with general information about mental health and help connect them to local resources based on their need. This study seeks to evaluate the usefulness or effectiveness of the chatbot in connecting people to the right resources, at the right time, based on a person's individual need.

This program is meant to compliment mental health care services, **not** replace them. **If this is an emergency, call 911, or the Mental Health Crisis Line at 1-888-737-4668.**

Who is involved in this project? This program has been developed in partnership with Mood Disorders Society Canada (MDSC), University of Alberta, University of Saskatchewan, Dalhousie University, AI4Society, the Alberta Machine Intelligence Institute (amii), the International Indigenous Health Research and Training Centre, and the Asia-Pacific Economic Cooperation (APEC) Digital Hub for Mental Health.

How long will I be in the study? Your participation is just however long your conversation with the chatbot is, and that conversation is anonymous. If you choose to volunteer your email for the follow-up surveys, we will send you a survey after you use the chatbot, and 24 hours following your use of the chatbot to see if it was helpful. We hope to have results on this study by April 2023.

How many people are participating in this study? Our study team is hoping that around 2,200 people will participate in this study (1,100 in Alberta and 1,100 in Nova Scotia).

How is the study being done? (information on surveys, data collection, and privacy and confidentiality): We are evaluating whether this service is helpful and effective. We would like to gather information in three different ways:

1) General Anonymous Data Collection: We would like to collect anonymous, collective data on how this program is used. None of the data we are collecting is at a person/individual level, so nothing you share with this program can be linked back to you in anyway. We are looking at general themes among groups of people. For example, we are interested in what groups of people are generally asking about or talking about with the chat bot. This will help us understand how people in groups are using the chat bot (for example, what the most frequently raised concern might be by people who used the chat bot).

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2) Transcripts to train the chatbot: If you provide consent, your conversation with the chatbot will be saved and used by the chatbot to help it learn to be better at talking with humans. The chatbot will not ask for any information that can identify you. If you accidentally provide personal information, our chatbot has been trained to detect it and delete it. The chatbot will remind you not to provide any information that can identify you in its welcome message to you, should you choose to provide consent and continue. If you start talking with the chatbot, but change your mind and want to withdraw your consent, and have the conversation deleted from the chatbot's memory, type "withdraw consent" at any time. If you close the chatbot window however, the conversation will be logged and closed, and you will not be able to withdraw consent. Because conversations with the chatbot are anonymous, we would not be able to find the conversation you had with the chatbot in order to delete it after it is closed and logged.

Additionally, if you agree to participate in the voluntary follow-up surveys, in the 24-hour follow-up survey we will ask you for your opinion and level of satisfaction with specific resources that the chatbot provided to you during your conversation with the chatbot. In order to present these individual resources to you for you to rate, the MIRA chatbot will extract and use the top recommendations presented to you during your conversation with the chatbot. The process of extracting this information from your transcript is done solely by computer code, and no human will be involved in this process.

3) Voluntary surveys: During your conversation with the chatbot, you will be asked if you would be willing to help us evaluate this service by providing us with your email. Giving us your email is voluntary. If you provide your email, you will receive two follow-up surveys - one now, and one in 24-hours from now. The survey does not ask you for any information that can identify you. Your email address will be used only to share the survey links with you, and to connect any surveys that you have completed so that we can track responses. Your email will not be shared with anyone and will not be used for anything other than what we have described here. When we are ready to analyze data, your email will be permanently deleted and replaced with a random number so as to protect your anonymity. No one will be able to identify you or your answers. You can choose to answer the surveys fully, skip some questions, or skip the surveys altogether by clicking the "skip survey" button on the surveys. If you don't answer one or all of the surveys, there is no penalty and you will still be offered access to the chat bot whenever you would like. In the 24-hour follow-up survey, we will ask you for your opinion and level of satisfaction with specific resources that the chatbot provided to you during your conversation with the chatbot. Please note: If your email is shared with or accessible by someone else, there is a risk that they may see what resources had been recommended to you during your conversation, which may be information you would rather keep confidential. In a situation like this, we recommend to NOT participate in the follow-up surveys.

Can my participation in this study end early? If you started filling out a survey, but change your mind and don't want us to use the information you shared with us, you can withdraw your survey answers at any time by pressing the withdraw button at the bottom of the survey. However, once you complete the 1 week survey, and/or at the end of the study testing/trial period (end date: March 1st, 2023), your email address will be deleted from our data and replaced with a random number to protect anonymity. Therefore, we cannot withdraw survey data after that information is deleted as there will no longer be an email address associated with surveys received.

If you would like to stop receiving surveys altogether, you can do so by clicking unsubscribe in the survey email you receive at any time, or by emailing our study coordinator Dr. Jasmine Noble, at JMBrown1@ualberta.ca.

Are there benefits to the study? You will receive no direct benefits from participating in this research study. However, there are possible benefits from use of the chatbot. In your conversation with the chatbot, the chatbot may provide you with information that you find useful. If you choose to connect to resources that the chatbot provided to you, they may support your wellbeing, or the wellbeing of the person you might be seeking information for.

Are there risks to the study? There are no foreseeable risks involved in participating in this study beyond those encountered in day-to-day life. However, some of the questions in this survey may remind you of something that happened at work that made you feel negative emotions (for example, sadness, anger, stress). If this happens, you may choose to stop the survey at any time. Please note, if you agree to participate in the follow-up surveys, the 24-hour follow-up survey will ask you to rate your level of satisfaction with the specific resources that had been recommended to you during your conversation with the chatbot. If your email is shared with or accessible by someone else, there is a risk that they may see what resources had been recommended to you during your conversation, which may be information you want to keep confidential. If you have an email address that is shared or could be compromised by someone else, we recommend to NOT participate in the follow-up surveys.

Additionally, there is low risk of a breach of privacy. If a privacy breach occurs, there is a chance that email addresses, not yet replaced with a randomized participant number, from voluntary survey responses during active data collection, may be accessed.

If you are experiencing severe distress, please seek help from your local emergency services or health provider.

Will it cost me anything? No. There is no cost to participate in this study.

What will happen to data collected in this study after the study is over? The information we gather will be entered into a statistical software for analysis, and will be kept on a password-protected, secure server. All responses will be deleted 10 years after data analysis has been completed. The data gathered may be looked at again to help us answer other study questions. If so, an ethics board will ensure that the data are used ethically.

What happens at the end of the study? We will evaluate the chatbot and are hoping to have a final report completed for this project by April 1st, 2023.

What about new information? You will be told about any other new information that might affect your health, welfare, or willingness to stay in the study and will be asked whether you wish to continue taking part in the study or not.

Declaration of financial interest: This study is unfunded. The PI has no vested financial interest in conducting this study.

What about questions or problems? If you have questions about the study or are interested in the findings, you may contact our research team members Dr. Jasmine Noble, at jbrown1@ualberta.ca.

What are my rights? You have the right to all information to help you decide whether or not to participate in this study. You also have the right to ask questions about this study and to have them

answered to your satisfaction before you make any decision. You also have the right to ask questions and to receive answers throughout this study.

If you have questions about your rights as a research participant and/or concerns or complaints about this research study, you can contact

1. The University of Alberta Research Ethics Board Office
    - (780) 492-2615
2. The Nova Scotia Health Research Ethics Board Office
    - email: ResearchEthics@nshealth.ca
    - Phone: 902-222-9263

Research Related Injury

If you become injured (privacy breach) as a direct result of allowing access to your health information the following will apply. Your consent to continue indicates that you have understood to your satisfaction the information regarding your participation in this study. In no way does this waive your legal rights nor release the principal investigator, the research team, the study sponsor or involved institutions from their legal and professional responsibilities.