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*Project: Partnering with patients to increase the usability of an existing health promotion app: development and evaluation of a voice-based chatbot*



### Background

Our team has developed a health app (nutrition, exercise, mental wellness) for patients living with chronic diseases. In its current form, the app requires a lot of touch (manual) input by the user. This is troublesome because it reduces patient engagement and accessibility to a powerful tool that promotes healthy living. In order to enhance the user experience, the purpose of this project will be to work with our patient partners to develop and evaluate a new patient-prioritized feature which will allow two-way voice-based communication between the app and a patient. Decisions made

regarding the development of the voice-based communication within the app will be primarily driven by patients. Patients who have previously used the app in research studies will be invited to participate in focus group discussions to identify key elements to prioritize for voice-based communication (e.g. nutrition tracking). After collecting and analyzing this data and better understanding patient priorities, our team will rework our existing application to integrate voice-based communication. We will test the new functionality with recruited patients to assess whether the app is acceptable and usable by them. After completion of simulated interactions and beta-testing, patients will participate in focus groups so our team can better understand the patient's perspective

on the refined tool and gauge whether they find the content presentation and conversational quality acceptable. We anticipate that the app that is enabled with the voice chatbot will reduce the need for manual input, reduce mental load on participants and in turn make the app easier to use. The ongoing work and findings from our patient-oriented app development process will be disseminated through presentation at conferences and publication in peer-reviewed journals.